User Manual

EP330 IP Phone
Version 2.0

Datang Gohigh Network Co., Ltd

www.gohigh.com.cn

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1 Introduction

Welcome to select our IP Phone and thanks for your trust and support to our company. We sincerely hope you can enjoy the convenience and capabilities brought forward by our products.
IP Phone provides all the features and functionalities of conventional phone and more. Our IP

phone guarantees rich function and superb voice quality at mass-affordable price, which is fully compatible with SIP industry standard and able to interoperate with most SIP compliant devices and software on the market.
This manual provides the information on basic operations and functions for IP Phone, which would assist users the fast access to learn basic functions and be familiar with operating these functions.

⚠ CAUTION

Although the adapter of IP Phone is compliant with UL standard, please do not attempt to use other difference power adapter or cut off power supply during configuration or updating phone. Using other power adapter may damage IP phone and will void the manufacturer warranty.

2 Installation

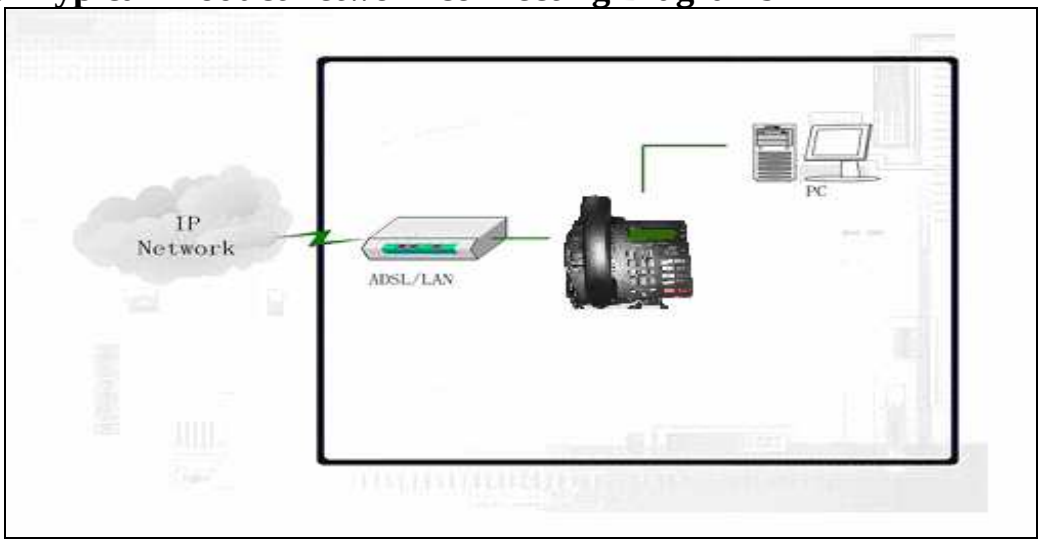
2.1 Installation

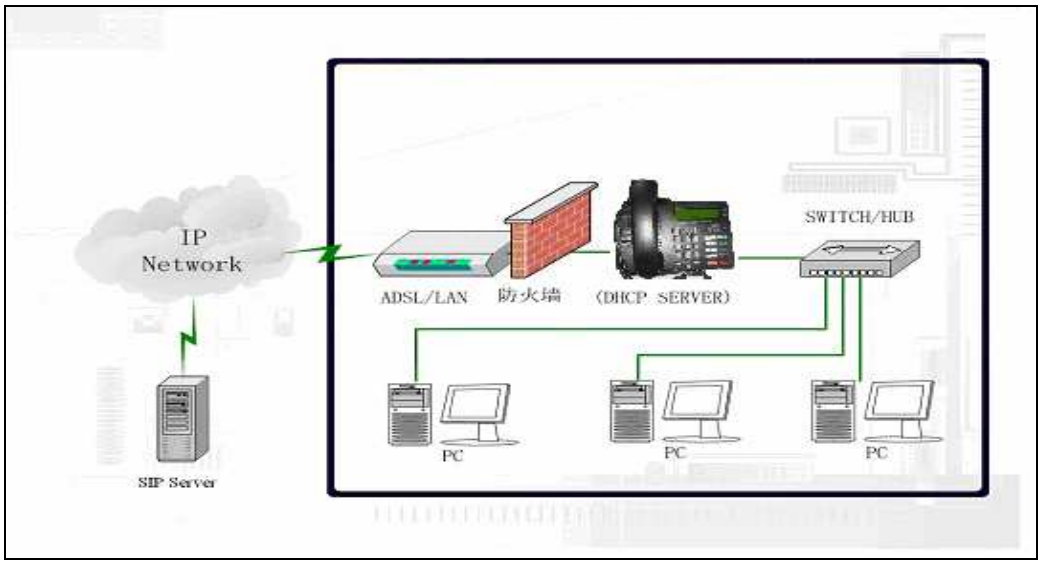
a) Insert handset cord into the handset jack and the other end to the left jack of IP Phone
b) Insert the power adapter's plug into the phone Power jack and the 2-prong plug end of which into grounded power outlet
c) Connect one end of the network cable to the WAN port, which is indicated as , the

other end to the internet.

d) If need to set up small LAN network, find the network cable in the box and connect it between LAN port, which is indicated as and your PC (PC is not required to set up for making a call)

2.2 Typical Product network connecting Diagrams





2.3 package

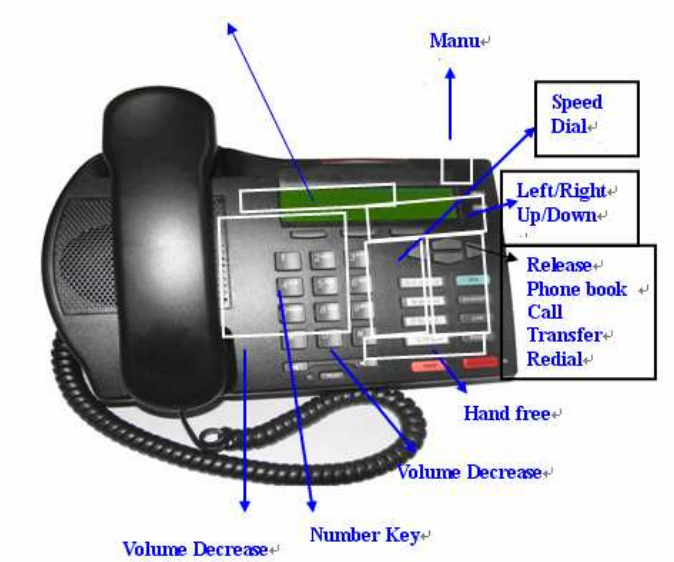
Unpacking the package of IP Phone and please clearly check the box contents according to below packing list .If you find any contents missing or damaged, contact the place of purchase.

Components Packing List

Components
Main Unit
Handset
Cord

Adapter
RJ45
network
cable
User Manual

IP Phone are designed to look alike conventional phones, the following photo shows a broad overview of the IP Phone.



2.4 Key introduction

There are 34 keys on the phone. Definitions of each is stated as below

Key Button	Mode	Definitions
0 -9	In the dial-up mode	Decimal digit number 0-9
	In the keypad configure mode	Rapid first press display the digit number 0-9,rapid second press display the English character or others
*	In the dial-up mode	As one part of phone number when call out
	In the call hold mode	Ready to call a third party's number to make three-way (or conference) calling
	In the keypad configure mode	Equal to the dots notation when input IP address Ex. 192.168.10.202
#	In the dial-up mode	As one part of phone number if "#" is the first dialed number, otherwise as the ending symbol to end up dialing
MENU	In the IDLE mode	Enter menu mode and display the tree menu system
Callers	In the IDLE mode	Check the Income/Outgoing/Missed calls record
Three flexible Function Keys	In the IDLE mode or In the keypad configure mode	Select the relevant function on the LCD
HOLD	In the keypad configure mode	Temporarily hold the active call
Transfer	In the keypad configure mode	Transfer the active call to another party
REDIAL	In the dial-up mode	Redial the number last dialed
	In the IDLE mode	Enter hands-free mode
UP/Down	In the keypad configure mode	Go back to previous menu item/ Go down to lower menu items
	In the idle mode	Continuous thrice press display assigned WAN Port IP, gateway's IP and the phone number registered on public server
Left/Right	In the keypad configure mode	Choose the item on the menu
MUTE	In the dial-up mode	Mute an active call;
Memory Key 1~4	In the IDLE mode	Show the corresponding recorded phone NO.
Rls	In any mode	Exit to the default idle mode
Directory	In the IDLE mode	Access to phone book.

Hand free	In the IDLE mode	Enable Hand free function
	In the IDLE mode	Adjust the dialing ring volume
	In the hand free mode	Adjust the hand free volume
	In the dial up mode	Adjust the handset volume

3 Product Overview

EP330 IP Phone is a next generation IP network telephone based on industry open standard SIP (Session Initiation Protocol).EP330 series IP Phone offer customer superb sound quality and rich functionalities at mass-affordable price.

3.1 Software Features

- Support two modes: Bridge and Router (NAT&NAPT)
- Network Protocols: TCP/UDP/IP,ICMP,HTTP,DHCP Client（WAN Interface）,DHCP Server（LAN Interface）,DNS Client, DNS Relay, SNTP, PPPoE, FTP,TFTP
- VOIP Protocols: Support H323 (V4)&SIP (RFC3261, RFC3262, RFC3264, RFC3265) synchronously
- Voice Codecs: G.711（A-law/U-law）,G.723.1(High/low),G.729
- NAT transversal: Support STUN client, etc. Can modify SIP register port, HTTP server port, Telnet server port and RTP port
- Support two SIP server synchronously：Can register two different SIP server, and can make a call by either proxy
- Support standard voice features such as numeric Caller ID Display, Call Waiting, Hold, Transfer, Do-Not-disturb, Forward, in-band and out-of-band DTMF, Hotline (off-hook autodial), auto answer, ban outgoing
- Full duplex hand free speakerphone, redial, call log, volume control,

voice record with indicator
- Support standard encryption and authentication (DIGEST using MD5, MD5-sess)
- Support Silence Suppression, VAD (Voice Activity Detection), CNG (Comfort Noise Generation), Line Echo Cancellation (G.168), and AGC (Automatic Gain Control)
- Provide easy configuration thru manual operation (phone keypad, Web interface and Telenet) or automated centralized configuration file via TFTP or HTTP
- Support firmware upgrade via TFTP/FTP and HTTP
- Support syslog, can send event of phone to syslog server

3.2 Hardware Specifications

The below table describes the hardware specifications of EP330 Phone

Item		EP330
Power Adapter		Input: 100-240VAC 50~60Hz Output: +5VDC, 1200mA
CPU		Infineon PSB21553 150MHz
Port	WAN	10/100Base T RJ-45 for LAN
	LAN	10/100Base T RJ-45 for PC
Power Consumption		Idle:1.4W / Active:1.8W
LCD size		3 inch (74×28mm)
Operating Temperature		0～40℃(32°～104℉)
Storage Temperature		-10°～60℃(14°～140℉)
Relative Humidity		10～65% (Non-condensing)
Dimension (W×H×D)		11.6× 8× 3 inch (29.5×20.5×7.5cm)
Weight (packaging included)		2.07 lb. (0.94kg)
Certification		CE / FCC Part 15 Class B

4 Basic Operations

4. 1 Dialing and Making Calls

4.1.1Dialing General PSTN Phone or Extension.

There are three dialing modes:

1. Pick up handset or press SPEAKER button, and then enter the phone numbers, IP phone will send out the numbers with the DTMF tones.
2. In the off hook mode or Hands-free mode, Press the REDIAL/SEND button directly to redial the number last called. Once pressed, the last dialed number will be displayed on the LCD with DTMF tones and an outgoing call is sent.
3. Make use of Speed dialing mode: enter PBOOK→SPEED DIAL→INPUT INDEX submenu to input the index which correspond to the phone number you want to dial, then the phone could automatically dial the number.

Process: PBOOKENTER—INPUT INDEX (1,2,3…) + #

4.1.2 IP to IP Calling

Making IP to IP calling is nearly same as dialing general PSTN Phone, there are three ways to set IP phone number and domain (more details please refer to 5.2.4)

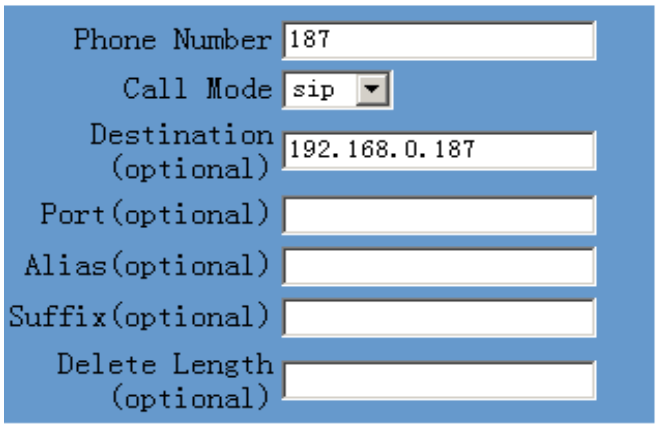
1. “Peer to Peer” calling mode: direct make calls and no need to set phone number thru proxy server (user could refer to Dial peer setting on web configuration charter).The phone should be operated under following condition (satisfy one option)

- Requirement 1 both two phones are assigned the public IP address individually
- Requirement 2 both two phones using private IP address should be on the same LAN.

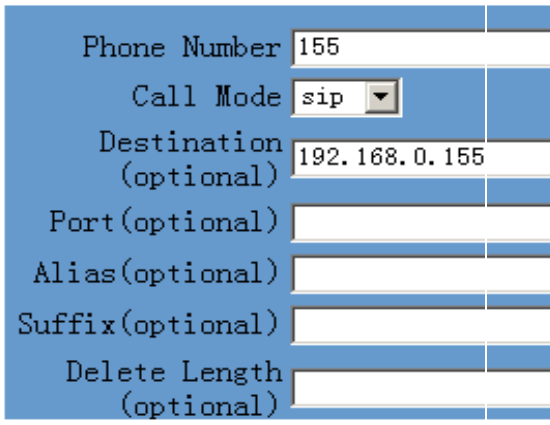
2. Dialing the IP number configured by public agency, both two phones should be already registered on the public server.
3. Dialing the IP number configured by private agency, both two

phones
should be already registered on the private server.
Examples:
To dial a number on the proxy, such as 1001, simply pick up handset or press speakerphone, dial 1001 and then press the REDIAL/SEND button.
To dial a PSTN number such as 62281486, you might need to enter in some prefix number followed by the phone number. Please check with your VoIP service provider to get the information. If your phone is assigned with a PSTN-like number such as 62281493, most likely you just follow the rule to dial 62281486 as if you were calling from a regular analog phone, followed by pressing the REDIAL/SEND button.
Example 1
If A dial number 187 , A can talk with B . If B dial number 155 , B can talk with A

A phone IP address 192.168.0.155
in dail peer config page



B phone IP address 192.168.0.
in dail peer config page

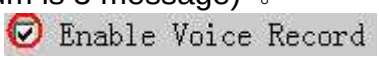


4.2 Answering Calls

There are three ways to receive incoming calls:

- Pick up handset to receive incoming calls
- Press the SPEAKER button to receive incoming calls
- Start-up the voice message function to record the incoming calls, afterwards listen to voice messages thru phone audio play .

Operations: Enter REC→RECEIVED→NEW→UP OR DOWN to the LIST NO submenu (maximum is 3 message) 。

Precondition : must enable 

in Advance /Call service

Note: User can switch from a hands-free call to handset by picking up the handset. To switch from a handset call to a hands-free call, press hands-free button, and then hang up the handset.

4.3 Call Hold

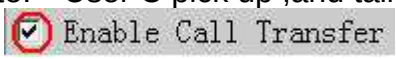
Pressing the HOLD button during current conversation enables you put an active calling on hold temporarily while a second call is answered or made, press this button again will go back to the previous call.

Precondition : must enable

in Advance /Call service

4.4 Call Transfer

Press the TRANSFER button enables users could transfer an incoming call to the third party's number. When user A and user B both sides are on conversation, Users A press <TRANSFER > button ,and then dial the thid party user C . User A will hand up . User C ring , User B is on Hold state. User C pick up ,and talk with user B .

Precondition : must enable 

in Advance /Call service

Process: Transfer button + the third party number

Example:A is talking with B , A press <Transfer> button and dial C number. A line break, then B will talk with C.

4.5 Three-Way Calling

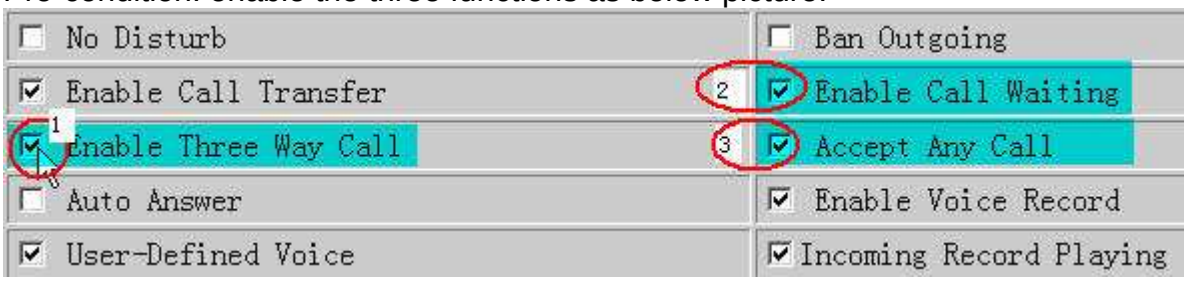
EP330 IP phone support three-way (or conference) Calling. That is users could talk to more than one person (up to two) at the same time.

Process: press HOLD button →Dial third party's number->put through→ press HOLD button again →Press * button

Once the three-way initiator concludes the three-way calling, the other two sides can not continue the conversation call and hand up automatically.

Example: A are talking with B. A press HOLD button for holding B line , and dial the third party`s number , so A will talk with C . A press HOLD button again for holding C line , A dial * , make three-way (or conference) calling successfully.

Pro-condition: enable the three functions as below picture.



Note:
The function 4.4 & 4.5 & 4.6 could be started or closed thru system setting, so when you need to use above three functions please make sure of opening these functions.

5 keypad configuration

Hereinabove the manual has defined the keypad function. It is easy to config IP phone thru

the keypads.
Get the assigned WAN Port IP, gateway's IP and the phone number registered on public server:
Press the Down Key for three times. It will display the WAN Port IP, gateway's IP and the phone number registered on public server

5.1 Speed Dial Memory Key setting

5.1.1 Set Speed Dial Memory Key

- press **Menu** Key in Idle mode:
- LCD displays 01 Memory Key
- Select Choose a Memory Key
- Choose one from Memory 1 ~ Memory 4
- Enter the phone number you want to speed dial
- Select Save
- Finished.

5.1.2 Dial Speed Dial Memory Key

Press Memory 1~4 key in idle mode

- Press Hand free or pick up the handset

Notice: The key cover can be moved. You can write what you want on the prepared paper in the inner box.

5.2 Screen display setting

- Pressing **Menu** Key in Idle mode
- Press the Down Key .
- The LCD displays **02 Screen Setting**

5.2.1 Letter contrast setting

Select **Enter**. The LCD displays 01 Contrast

- Adjust the letter contrast by pressing Left Key or Right Key
- Select Save
- Finished.

5.2.2 Brightness setting

- Select **Enter**
- Press the Down Key . The LCD displays **02Brightness**
- Select ■ Off, ■ Low, ■ High of the brightness by pressing Left Key or Right Key
- Select Save
- Finished.

5.3 Volume Setting

- Pressing **Menu** Key in Idle mode
- Press the Down Key twice. The LCD displays **03 Volume Setting**

5.3.1 Ringer Volume Setting

- Select **Enter**. The LCD displays 01 Ringer Volume
- Adjust the ringer volume by pressing Left Key or Right Key
- Select Save
- Finished.

5.3.2 Call Part Volume

- Select **Enter**. The LCD displays 01 Call Party Volume
- Adjust the call party volume by pressing Left Key or Right Key
- Select Save
- Finished.

5.4 Greeting Message Setting

- Pressing **Menu** Key in Idle mode
- Press the Down Key three times. The LCD displays 04 Greeting Message

- Select **Edit**
- Enter the greeting message with the Number Key and Letter Key (The LCD displays number while pressing Number Key 0 ~ 9 once and displays the Lowcase letter / Capital letter while pressing twice. The * stands for full stop or comma. # stands for space.
- Select Save
- Finished

5.5 Language Setting

- Pressing **Menu** Key in Idle mode
- Press the Down Key four times. The LCD displays 05 Language

Notice: The phone only support English at present. It will support more than one language in the future.

5.6 SIP Setting

- Pressing **Menu** Key in Idle mode
- Press the Down Key five times. The LCD displays 06 SIP Setting

5.6.1 SIP server setting

- Select Enter. The LCD display 01 SIP 1
- SIP 1 setting
- Select Enter. The LCD display 01 SIP 1 Server
- Select Edit. Enter the IP domain/ IP address.
- Select Save
- Finished.
- SIP Number Setting
- Return to 01 SIP 1
- Press the Down Key once. The LCD displays 02 SIP 1 Number
- Select Edit. Enter the SIP 1 Number
- Select Save
- Finished.
- SIP Account Setting
- Return to 01 SIP 1
- Press the Down Key twice. The LCD displays 03 SIP 1 Account
- Select Edit. Enter the SIP 1 Account
- Select Save
- Finished.
- SIP Password Setting
- Return to 01 SIP 1
- Press the Down Key for three times. The LCD displays 04 SIP 1 Password
- Select Edit with Flexible Function Key. Enter the SIP 1 Password
- Select Save
- Finished.
- Register Setting
- Return to 01 SIP
- Press the Down Key for four times. The LCD displays 04 SIP 1 Register
- Press Left Key or Right Key to select □ ON / □ OFF
- Select Save
- Finished.
- SIP 1 Account Setting finished.
- SIP 2 Account Setting is the same as SIP 1 Account Setting
- **(Notice: You can select the SIP account by pressing SIP** with Flexible Function Key when the phone is registered two SIP account.)

5.7 Network Setting

- Pressing Menu Key in Idle mode

- Press the Down Key for six times. The LCD displays 07 Network Setting
- Net Mode Setting
- Select Enter. The LCD displays 01 Net Mode
- Press Left Key or Right Key to select □ Static / □ DHCP /□PPPoE
- Select Save
- Finished.
- Static Setting
- Return to 07 Network Setting.
- Select Enter and go into WAN port network setting.
- Press the Down Key and go into the Static Setting.
- The LCD displays 02 Static Setting
- Select Enter the LCD displays 01 Static IP
- Select Edit . Enter the Static IP.
- Select Save
- Finished.
- Return to the Static IP Setting mode. The LCD displays 02 Static Setting
- Select Enter and press
- Select Enter . Press the Down Key twice.The LCD displays 04 Static DNS
- Select Edit . Enter the gateway IP
- Select Save
- Finished.

5.7.1 PPPoE Setting

- Return to 07 Network Setting.
- Select Enter and go into WAN port network setting.
- Press the Down Key twice. The LCD displays 03 PPPoE Setting
- Select Enter. The LCD displays 01 Account
- Select Edit . Enter the PPPoE account. Please refer to 3.4
- Select Save
- Finished.
- Return to 03 PPPoE Setting
- Select Enter. Press the Down Key .The LCD displays 02 Password
- Select Edit . Enter the PPPoE password.
- Select Save
- Finished.

5.8 Ring Type Setting

- Press Menu Key in Idle mode
- Press the Up Key . The LCD displays 08 Ring Type.
- Press Left Key or Right Key to select the ring type.(There are 8 default ring types).
- Select Save
- Finished.

5.9 Check the Callers Record

- You can check the incoming calls, outgoing calls and missed calls by pressing Callers

5.9.1 Voice Record

- Voice record while calling
- Press Rec.
- Press Stop to stop the record.
- **Notice: You can make voice record for 20 minutes.**
- Check the voice record

- Press Rec. The LCD displays Receive Record
- Select Enter

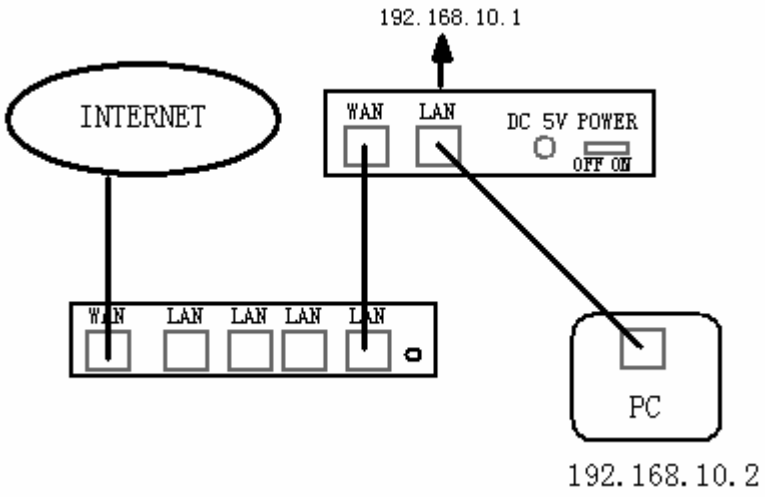
5.9.2 User Record

- Press Rec
- Press the Down Key
- enter User Record → Press Rec

Notice: The record can work as User message.

6.0 Web Configuration

6.1 Physical Connection

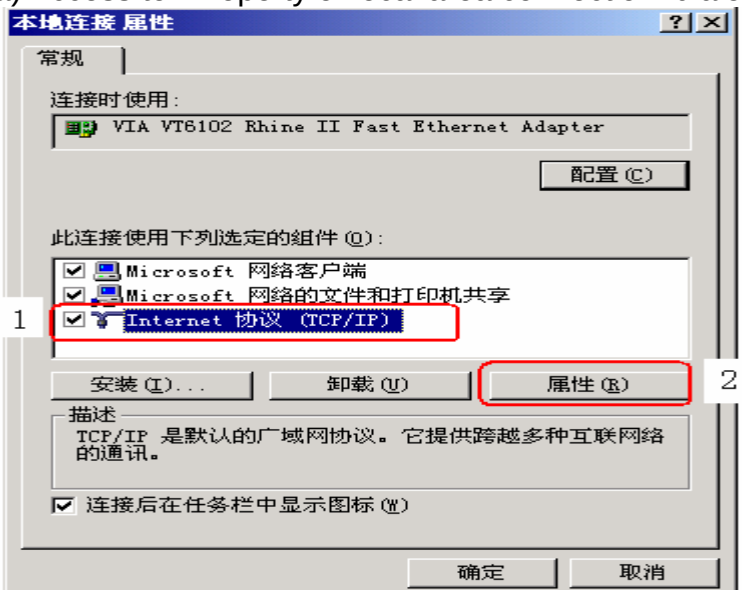


6.2 Preparation for Web Configuration

The IP Phone Web Configuration Menu can be accessed by the following URI: http://Phone-IP-Address. The IP address can be set to either WAN IP address or LAN IP address, default factory setting of WAN configuration is DHCP Client model, default LAN IP address is “192.168.10.1”.

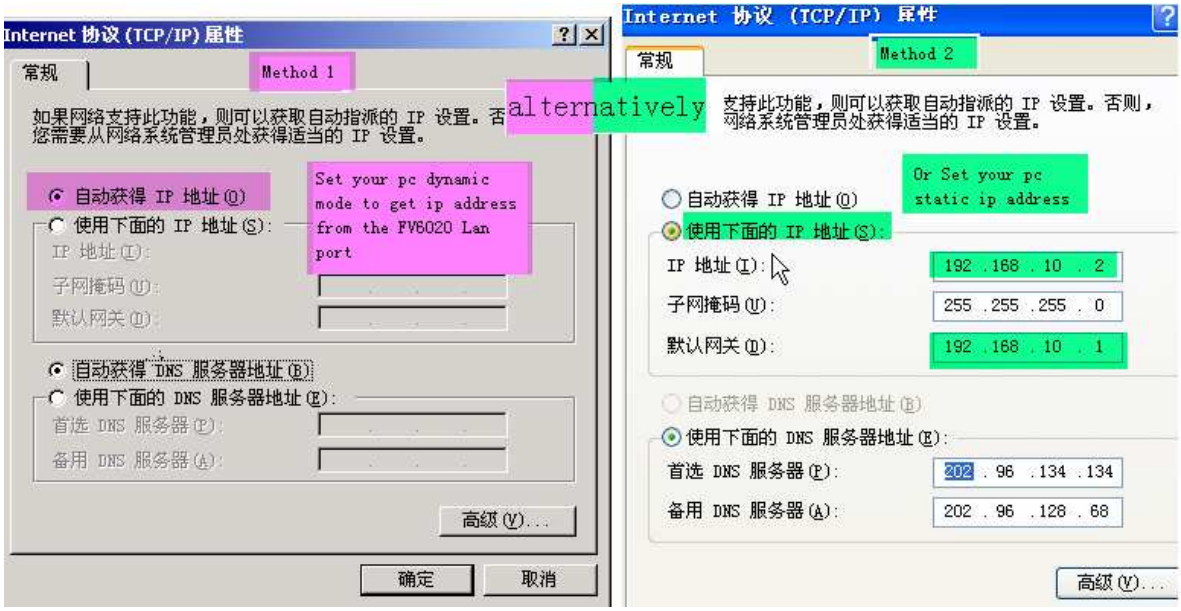
If connect PC with IP Phone LAN port and config to obtain IP address automatically, you could check the default gateway IP namely LAN IP address of IP Phone. The procedure as below

a) Access to “Property of local area connection” dialog box



b) Select “Internet Protocol (TCP/IP)”,click “Property” button

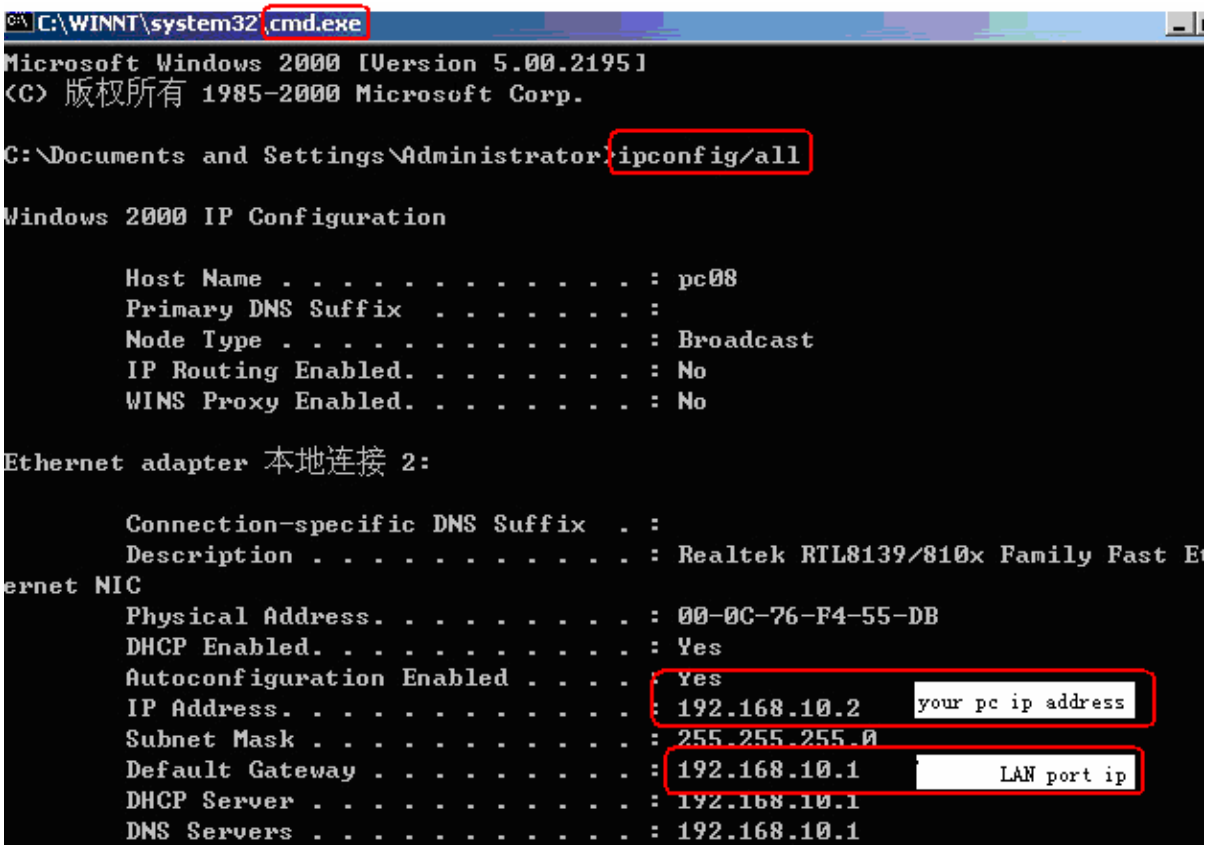
c) Setting refers to below dialog box, and then click “OK” button, PC will obtain IP address automatically.（or set your pc static ip 192.168.10.2）



Method 1 **Method2**

d) Input “cmd” command on the RUN submenu under PC START, key in “ipconfig/all on the command lines dialog box to find the default gateway

IP address, which is LAN IP address of IP Phone.


C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) 版权所有 1985-2000 Microsoft Corp.
C:\Documents and Settings\Administrator>ipconfig/all
Windows 2000 IP Configuration
Host Name . . . . . : pc08
Primary DNS Suffix . . . . . :
Node Type . . . . . : Broadcast
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
Ethernet adapter 本地连接 2:
Connection-specific DNS Suffix . :
Description . . . . . : Realtek RTL8139/810x Family Fast E
ernet NIC
Physical Address. . . . . : 00-0C-76-F4-55-DB
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IP Address. . . . . : 192.168.10.2
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.10.1
DHCP Server . . . . . : 192.168.10.1
DNS Servers . . . . . : 192.168.10.1
your pc ip address
LAN port ip

6.3 User verification

Users are requested to make verification when config or browse the IP phone thru web pages, users can direct login the config menu by inputting username and password as below:

Default username and password is:

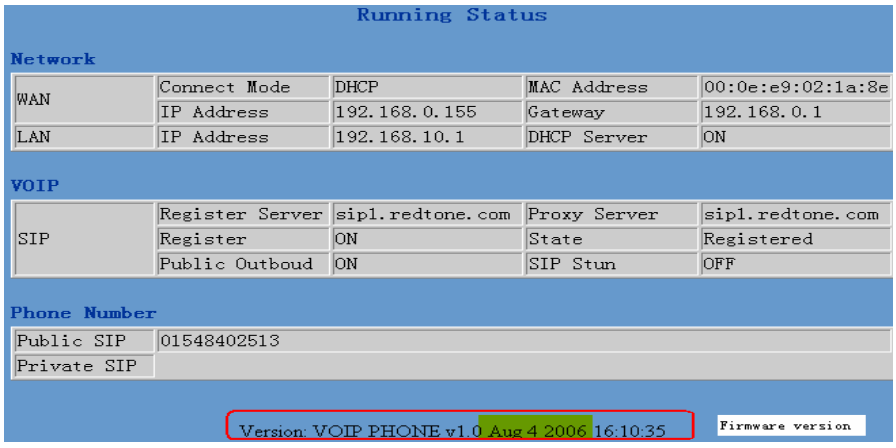
Administrator: Username: admin password: admin high level user interface

User: Username: guest Username: guest low level user interface

6.4 Current State

On this page user can gather information of each commonly-used parameter of the phone, it is shown as the following figure:

- Network section: Display the current WAN, LAN configurations of the phone
- VoIP section: Display the current default signaling protocol in use，and server parameter in use of each protocol
- Phone Number section: Display the phone number against each protocol



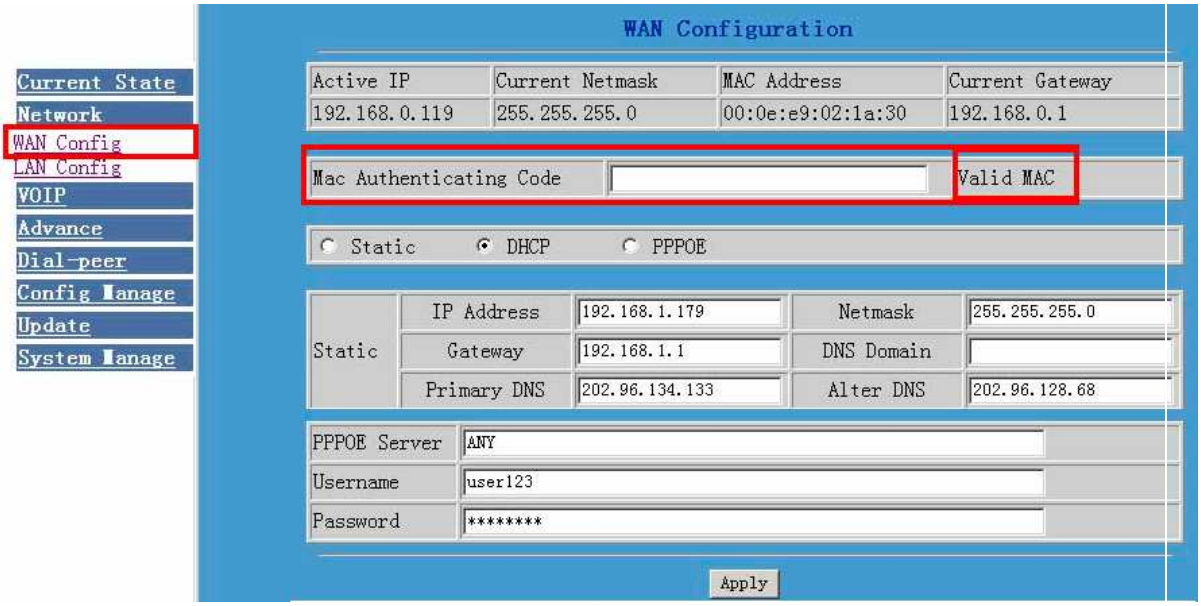
- The version number and date of issue have been shown at the end of this page

6.5 Network Configuration

Network configuration includes WAN Config and LAN Config.

6.5.1 WAN Configuration

This web page displays the WAN parameter configuration.



Display <valid MAC >, that means the phone had been certificated.
Display <invalid MAC>, that means the phone need a Mac Authenticating Code .(get it from Gohigh or your provider)
Display <invalid MAC, that means the phone can not work normally.
Three models (Static /DHCP/PPPoE) are paratactic. Users can set the right model base on actual requirements.

- Connect network to internet thru Static mode

Default network config is DHCP model; Users need to set below parameters

Static	IP Address	192.168.10.71	Netmask	255.255.255.0
	Gateway	192.168.1.1	DNS Domain	voip.com
	Primary DNS	192.1.1.1	Alter DNS	192.1.1.1

IP Address	**WAN IP address**
Netmask	Network mask
Gateway	Default gateway IP address
DNS Domain	Option configuration
Primary DNS	IP address for primary Domain Name Server
Alter DNS	Option configuration

Click “Apply” button after finished above setting, IP Phone will save the setting automatically with immediate effect.
If users visit IP Phone thru WAN, it need to input “ipconfig” command to get the new IP address and copy it to web browser bar to visit IP Phone.

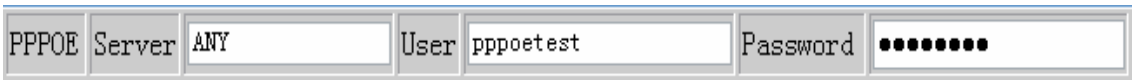
- Connect network to internet thru DHCP mode

Select “DHCP” on below single option, IP Phone will auto-config the WAN parameter with immediate effect.

- Connect network to internet thru PPPoE mode

Select “PPPOE” on below single option,

Set below parameter of PPPOE mode

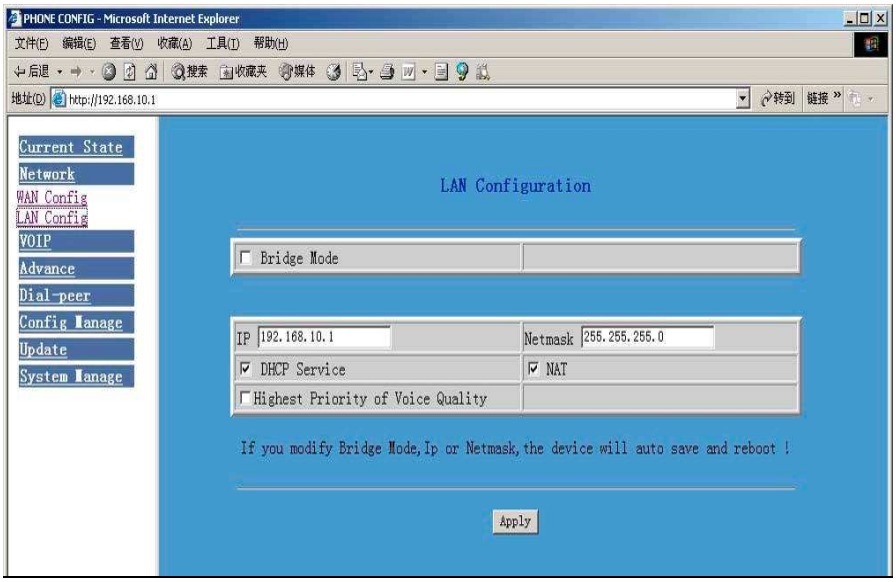


Server	**If ISP no special requirements, remains default setting**
User	Provided by ADSL ISP
Password	Provided by ADSL ISP

Click “Apply” button after finished above setting, IP Phone will auto-config the WAN parameter with immediate effect. The setting of WAN is still effective and enables IP Phone to connect to internet.

6.5.2 LAN Configuration

This web page displays the LAN parameter configuration. Please note once the bridging mode is selected, the LAN configuration will be no longer effective.



Configuration Example

- Config LAN: generally config one private IP address

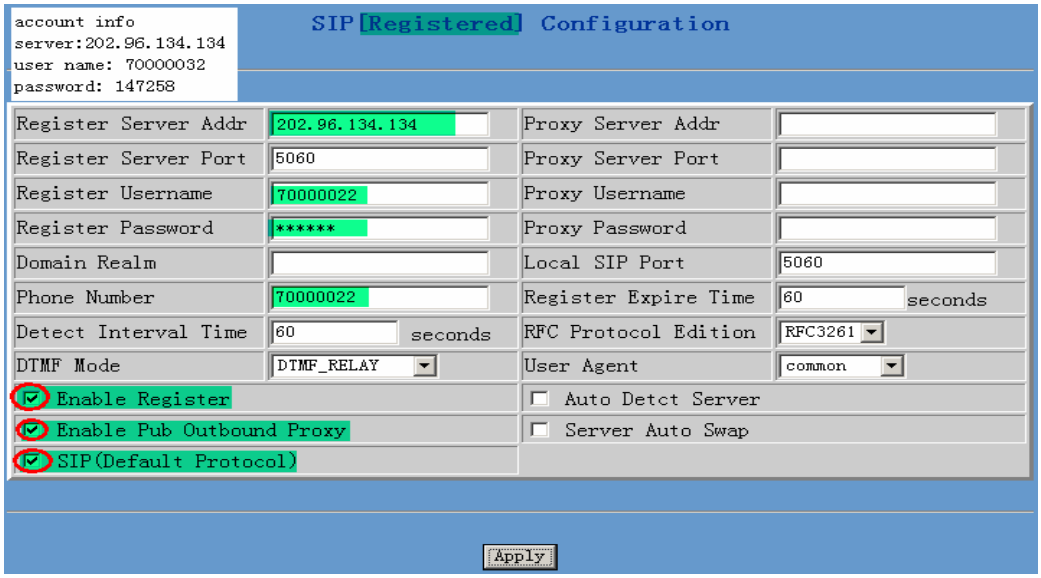
IP	**LAN IP address**
Netmask	Network Mask

- Start LAN DHCP Service and NAT or not: default setting is start

Start Bridge Mode or not（transparent mode）: Once start Bridge Mode, some parts of LAN config will be disabled, and the phone will no longer set IP address for LAN physical port，LAN and WAN will join in the same network；

6.6 VOIP Configuration

This section is to config signaling protocol for the SIP Server and Client. User can configure specific parameter of SIP1 on this page:



Definition of each parameter described as below:

SIP[Unregistered] Configuration	**SIP register state；if register successfully, show "Registered" in the square bracket，otherwise show Unregistered**
Register Server address	Set SIP register server IP address
Proxy Server addr	Set proxy server IP address（usually SIP will provide the same configuration of proxy server and register server, if different(such as different IP addresses), then each server's configuration should be modified separately）
Register Server Port	Set SIP register server signal port
Proxy Server Port	Set SIP proxy server signal port
Register Username	Set SIP register server account username（Usually it is the same with the config port number）
Proxy Username	Set the SIP proxy server account username
Register Password	Set password of SIP register server account
Proxy Password	Set password of SIP register account
Domain Realm	Enter the sip domain if any, otherwise EP330 will use the proxy server address as sip domain. (Usually it is same with registered server and proxy server IP address).
Local SIP Port	Set local signal port，the default is 5060
Phone Number	Set assigned phone number
Register Expire Time	Set expire time of SIP server register, default is 120 seconds
Detect Interval Time	Set detection interval time of server, default is 120 seconds
RFC Protocol Edition	Enable the phone to use protocol edition. When the phone need to communicate with phones using SIP1.0 such as CISCO5300 and so on, need to modify into RFC2543. the default is to RFC3261；
DTMF Mode	Set DTMF sending mode, support RFC2833, DTMF_RELAY (in-band audio) and SIP info

User Agent	Set the user agent if have, default is common
Enable Register	Configure enable/disable register
Auto Detct Server	Co-work with Server Auto Swap and Detect Interval Time. Enable this option, EP330 will periodically detect whether the public SIP server is available, if the server is unavailable, the EP330 will switch to the back-up SIP sever, and continue detecting the public sip server. EP330 will switch back to the primary SIP server if the server is available again.
Enable Pub Outbound Proxy	Configure to enable to use public outbound proxy，if you have no stun server , advise to enable the option
Server Auto Swap	Configure main and backup auto-swap server；if the phone enables main and backup server function，the automatic detection and auto-swap functions should both be chosen
SIP (Default Protocol)	Set SIP as the default signaling protocol

After finished the aforesaid network and VoIP configurations on the phone and network communication has been implemented，the user can make VoIP calls by the calling register and proxy server.

Note:
Some ISP internet may inhibit the phone to register and cancel the register in process, so user had better cancel apply or register soon and then submit registration repeatedly. Server may stop response of dialogue machine, then the phone receives no register/cancel login request and registration state will show incorrectness!

Configuration Example
Firstly users should get the account info from VOIP Operator (Including Server IP address, port, username, password etc.) and follow below procedure.

- Config registered server and proxy server IP address and signaling port.

(Support DNS for registered server and proxy server)

Register Server Addr	10.1.1.139	Proxy Server Addr	192.1.1.139
Register Server Port	5060	Proxy Server Port	5060

- Config the username and password for registered server and proxy server.

Register Username	client	Proxy Username	client
Register Password	••••	Proxy Password	••••

- Config the phone number (Usually phone number is same with SIP account)

Remark: due to the above register username is “client”, so the phone number is different from SIP account)

Phone Number	62281493

- Config the domain realm (Usually it is same with registered server and proxy server IP address, Let it be blank)

Domain Realm	10.1.1.139

- Select below two option and registered in local outbound public proxy

☐ Enable Register & ☐ Enable Pub Outbound Proxy

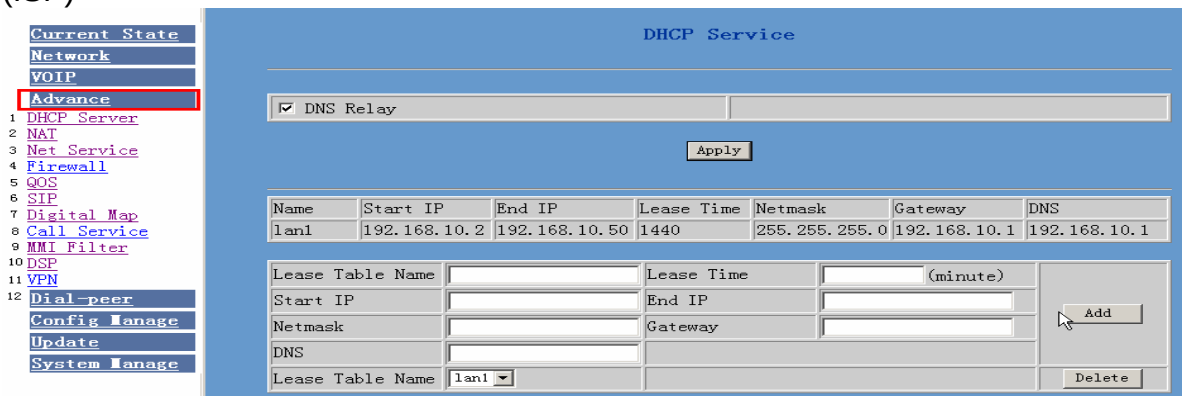
Usually these two option need to be selected, when you want to use SIP1.

6.7 Advance

6.7.1 DHCP Server Configuration

When EP330 work as a router, this config is for EP330 LAN port network device

DNS Relay: DNS relay acts as a forwarder between the DNS Clients and the DNS Servers, DNS relay is designed for home/office networks where the users might want to dial into more than one Internet Service Provide (ISP)



DHCP server manage page.

User may trace and modify DHCP server information in this page.

DNS Relay: enable DNS relay function.

User may use below setting to add a new lease table.

Lease Table Name: Lease table name.

Lease Time: DHCP server lease time.

Start IP: Start IP of lease table.

End IP: End IP of lease table. Network device connecting to the EP330 LAN port can dynamic obtain the IP in the range between start IP and end IP.

Netmask: Netmask of lease table.

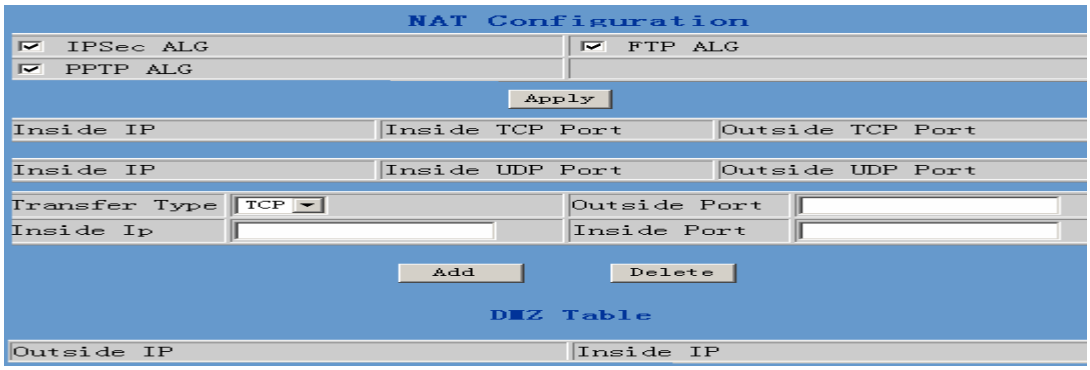
Gateway: Default gateway of lease table

DNS: Default DNS server of lease table.

Notice: This setting won't take effect unless you save the config and reboot the device

6.7.2 NAT Configuration

This page is for NAT configuration, such port forward, DMZ . Network Address Translation (NAT) provides a mechanism for a privately addressed network to access registered networks, such as the Internet, without requiring a registered subnet address. This eliminates the need for host renumbering and allows the same IP address range to be used in multiple intranets. With NAT, the inside network continues to use its existing private or obsolete addresses. These addresses are converted into legal addresses before packets are forwarded onto the outside network.



Advance NAT setting: Maximum 10 items for TCP and UDP port mapping.

IP Sec ALG: Enable/Disable IP Sec ALG;
FTP ALG: Enable/Disable FTP ALG;
PPTP ALG: Enable/Disable PPTP ALG;
Transfer Type: Transfer type using port mapping.
Inside IP: LAN device IP for port mapping.
Inside Port: LAN device port for port mapping.
Outside Port: WAN port for port mapping.

Click Add to add new port mapping item and Delete to delete current port mapping item.

6.7.3 NAT Service Configuration

6.7.3.1

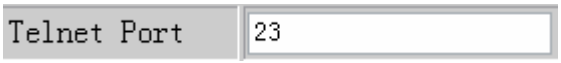
Configure web browse port, the default is 80 port，if you want to enhance system safety，you'd better change it into non-80 standard port；

Example:

The ip address is 192.168.1.70. you change the port value to

8090, the accessing address is http://192.168.1.70:8090
But if the value is 0, that imply it can not be configured by web browser.

6.7.3.2



Configure telnet port，the default is 23 port. You can change the value to others.
Example: The IP address is 192.168.1.70. you change the port value to 8023, the accessing address is telnet 192.168.1.70:8023

6.7.3.3

Enable RTP initial port configuration. It is dynamic allocation；

6.7.3.4

Configure the maximum quantity of RTP port. The default is 200；

Leased IPMAC correspondence table of DHC. The table will display all device getting IP address from EP330 LAN port by DHCP.

The configuration on this page needs to be saved after modified and will go into effect after restarting. If the Telnet, HTTP port will be modified, the port is better to be set as greater than 1024,because the 1024 port system will save ports. ※Set the HTTP port as 0，then the http service will be disabled.

6.7.4 Firewall

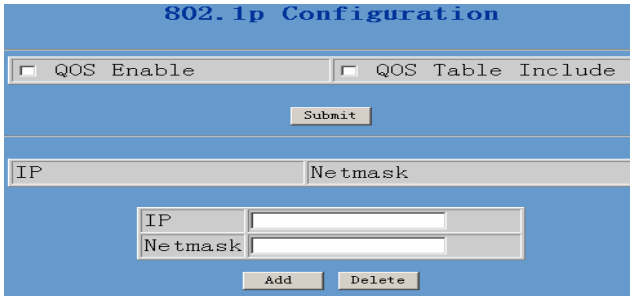
Firewall Setting Page. User may set up firewall to prevent unauthorized Internet users from accessing private networks connected to the Internet (input rule), or prevent unauthorized private network devices to access the internet.

Access list support two type limits: input_access limit or output_access limit. Each type support 10 items maximum.

EP330 firewall filter is base WAN port. So the source address or input destination address should be WAN port IP address.

Configuration:
in_access enable: enable in _access rule
out_access enableA: enable out _access rule
Input/Output: specify current adding rule is input rule or output rule.
Deny/Permit: specify current adding rule is deny rule or permit rule.
Protocol Type: protocol using in this rule: TCP/IP/ICMP/UDP.
Port Range: port range if this rule
Src Addr: source address. can be single IP address or network address.
Dest Addr: Destination address can be IP address or network address.
Src Mask: source address mask. Indicate the source is dedicate IP if set to 255.255.255.255. Otherwise is network ID
Des Mask: Destination address mask. Indicate the source is dedicate IP if
set to 255.255.255.255. Otherwise is network ID

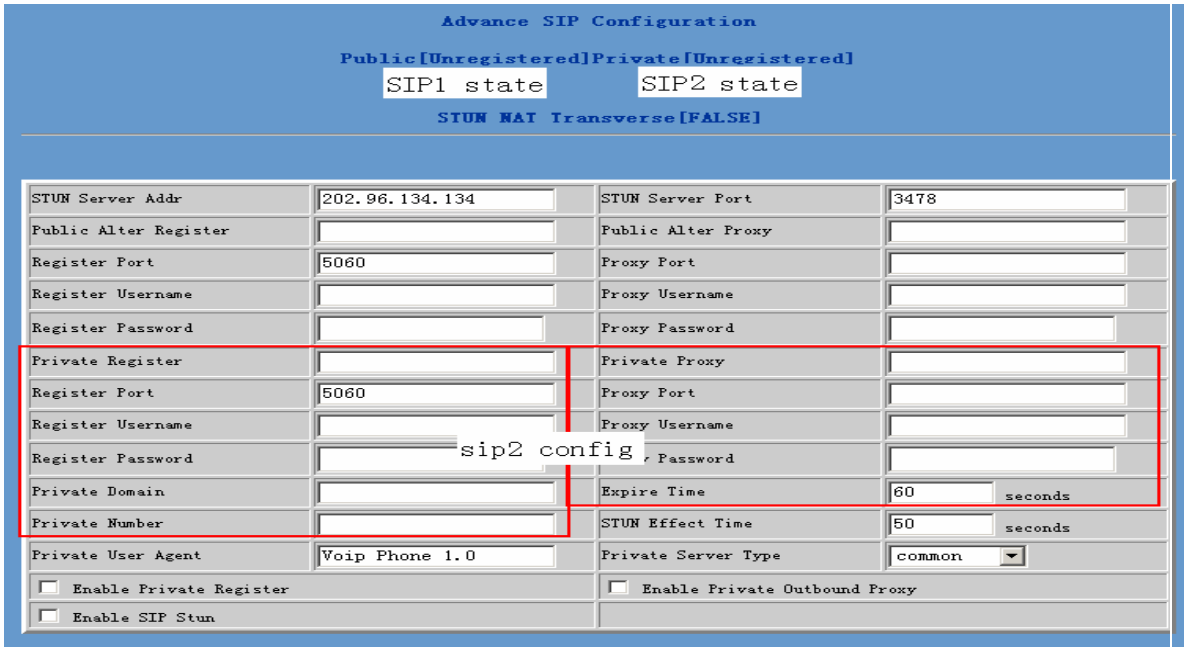
6.7.5 QOS 802.1p Configuration



QoS Control based on 802.1p for different IP users. The QoS is used to mark the network communication priority in the data link/MAC sub-layer. EP330 will sorted the packets using the QoS and sends it to the destination. QoS provides service classes for accessing traffics in Internet.

QoS Enable: Enable QoS service.
QoS Table: enable include QoS table, EP330 will only provide QoS service to the network address included in the QoS table. Disable the option. EP330 provides QoS service to the network address outside the QoS table.
Delete Enter the IP/MASK configure and select delete to delete corresponding item
Add: user can set the QoS Table using IP and Netmask. the IP can be network address (set netmask to 255.255.255.255)

6.7.6 Advance SIP Configuration



Public[Unregistered]Private[Unregistered]

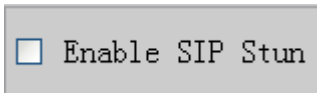
To show the phone whether has been registered on public server or private server

SIP STUN Configuration:
STUN can support SIP terminal's penetration to NAT in the inner-net. In this way， as long as there is conventional SIP proxy and a STUN server placed in the public net, it will do; but STUN only supports three NAT modes：FULL CONE, restricted, port restricted.

IF you have stun server .please input stun server address here.

The STUN server default port is 3478

The unit is minute. if you have STUN server .please input interval time for STUN`S detection on NAT type.



Configure enable/disable SIP STUN；if you have stun server .please enabe the option.

Public Backup Server Configuration

Public Alter Register	10.1.1.11	Public Alter Proxy	0.0.0.0
Register Port	5060	Proxy Port	5060
Register Username	1234	Proxy Username	1234
Register Password	••••	Proxy Password	••••

The specific configuration parameter has the same meaning with public server. It should be noted that the username and password should be the same with the public main server.

Private Server(SIP2) Configuration.

Private Register	207.145.183.115	Private Proxy	
Register Port	5060	Proxy Port	
Register Username	2008	Proxy Username	
Register Password	••••	Proxy Password	
Private Domain		Expire Time	60 seconds
Private Number	2008	STUN Effect Time	50 seconds
Private User Agent	Voip Phone 1.0	Private Server Type	common
☑ Enable Private Register		☑ Enable Private Outbound Proxy	

Specific configuration parameter has the same meaning with public server.

☐ Enable Private Server Register

Configure permit/deny private server register；

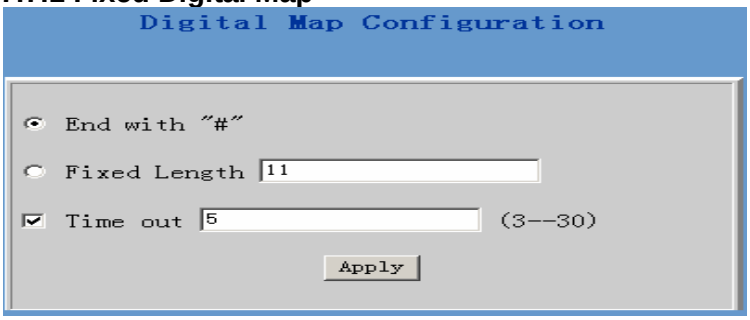
☐ Enable Private Outbound Proxy

Configure enable/disable private outbound proxy； if you have no stun server .advise to enable the option.

Note: about how to use SIP ,Please refer to the Dial peer chapter.

6.7.7 Digital Map Configuration

6.7.7.1 Fixed Digital Map



End With "#": Use # as the end of dialing.

Fixed Length: When the length of the dialing match, the call will be sent.

Timeout: Specify the timeout of the last dial digit. The call will be sent after timeout

6.7.7.2 User Define Flexible Digital Map Table

Digit map is a set of rules to determine when the user has finished dialing. Digital Map is based on some rules to judge when user end their dialing and send the number to the server. With digital map, users don't have to press '#' key or "call"key after dialing. If the number dialed matches some item in the digital map table, or it doesn't match with any item, this number will be sent out immediately. It is not like using dial peer . Using digital map won't change the number dialed, the number sent is the same as the number dialed.

X represents any one number between 0 and 9.

Tn represents the last digit timeout. here [n] represents the time from 0~9 second, it is necessary. Tn must be the last two digit in the entry. If Tn is not included in the entry, we use T0 as default, it means system will sent the number immediately if the number matches the entry.

(Dot) represents any number and no length limit.

[ ] number location value range . It can be a number range(such as [1-4]), or number is separated by comma such as [1,3,5],, or use a list such as [234]

Example:

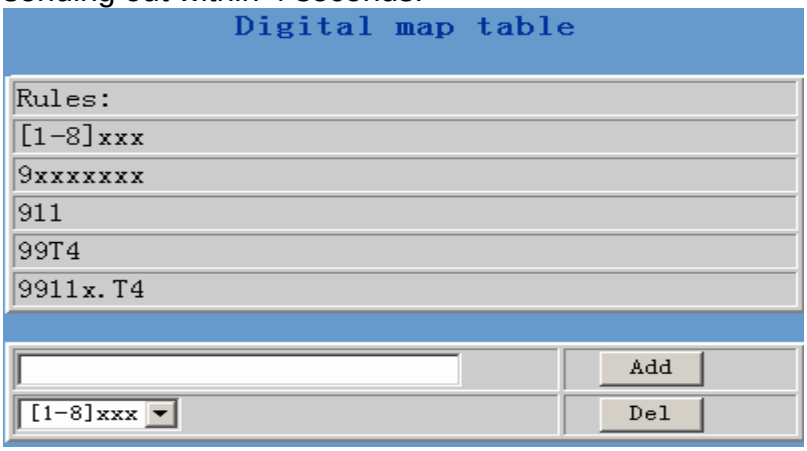
[1-8]xxx any 4 digits number between 1000 and 8999 sending out immediately

9xxxxxxx any 8 digits number starting with 9 sending out immediately

911 after finishing dialing 911 ,it will send out immediately

99T4 after finishing dial 911, it will send out in 4 second

9911x.T4 any more than 5 digits length starting with 9911, sending out within 4 seconds.



Using digital map can be combined with dial peer. First digital map will determine when the user finished dialing, then convert this number to the number actually sent according to "dial peer".

Dial-Peer

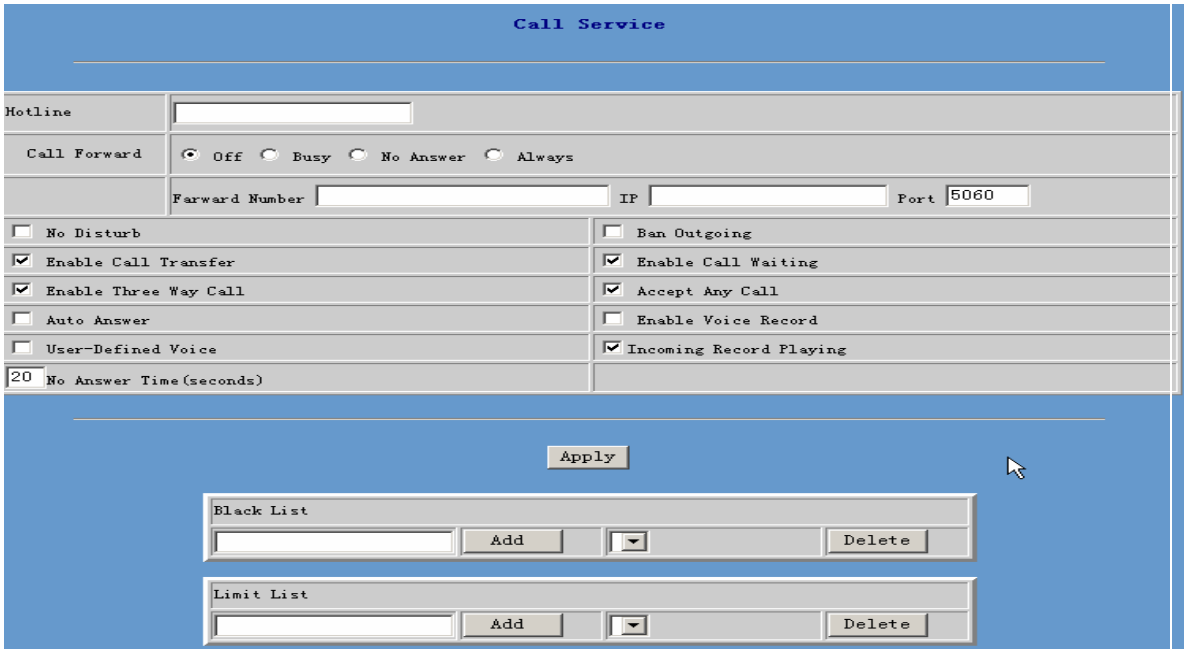
Number	Destination	Port	Alias	Suffix	Del length
2887	192.168.0.155	5060	no alias	no suffix	0
98765432	192.168.0.155	5060	no alias	no suffix	0
911	192.168.0.155	5060	no alias	no suffix	0
99	192.168.0.155	5060	no alias	no suffix	0
9911234	192.168.0.155	5060	no alias	no suffix	0

When user dial 2887 or 98765432、911、99 、9911234，they will send out immediately.

6.7.8 Call Service Configuration

Value added service configuration

On this page, user can set value added services such as hot-line，call forwarding，call transfer (CT)，call-waiting service，three way call，blacklist，out-limit list and so on.

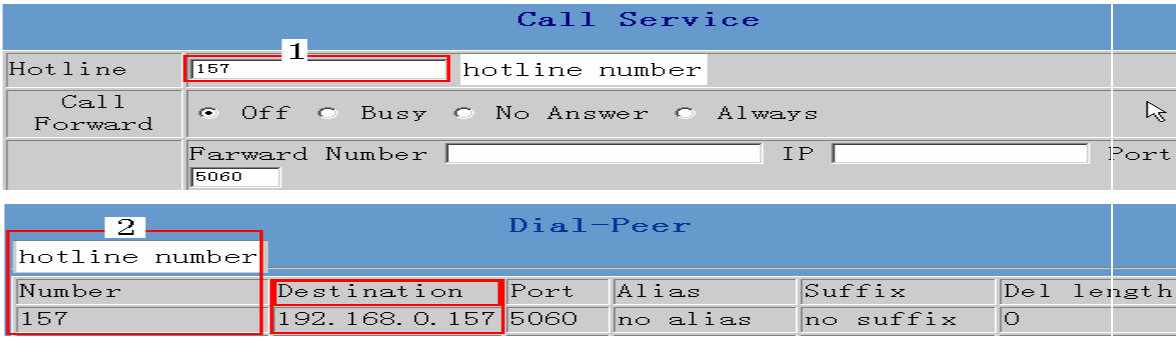


6.7.8.1 Hotline

Hotline	

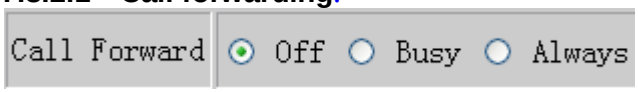
Configure hot-line number of the port. With this number of the port，this hot-line number will be dialed automatically as soon as off-hook and user can's dial any other number. If you do not use hotline, please let it be blank.

Configuration example:



6.7. 8.2 Call feature

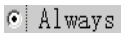
6.7.8.2.1 Call forwarding.



Call forward default is Disable. When

is selected，if the number dialed is engaged after the phone has received a call, then it will automatically transfer to the configured number according to the following picture (CF001 forward) configuration. when

is selected，if the phone do not receive the incoming call .it will **automatically** in

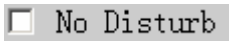
forward to the configured number according to the following picture (CF001 forward) configuration. When 

is selected，then the phone will directly transfer all incoming call to the number that had configured in advance like the picture showing.

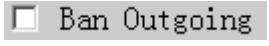
Picture:CF001

Note:
1 Number can be sip server extension number or DID number (any PSTN number)
2 the function have no relationship with the option

that enable or disable

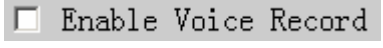


If it is enabled, the phone will not ring when there is a incoming call . DND, do not disturb, enable this option to refuse any calls.

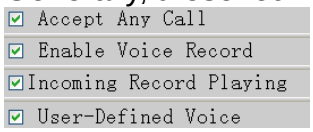


Enable this to forbid outgoing calls.

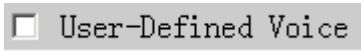
If it is enabled, when there is a incoming call .the phone will automatically press SPEAKER button.



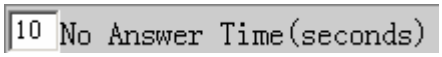
If it is enabled, the phone can record the incoming call leaving voice message.
It support only 3 leaving message. It can not record leaving message when it had reach the maximum. After restarting the phone, the message will lose . or you can delete the record message by manual(on phone operation).
If it is enabled, after playing the prompt message, the phone will automatically press SPEAKER button and start to record leaving message.
Generally, these four option are selected together



If it is enabled, the caller will hear EP330 automatically play prompt message (welcome message.)

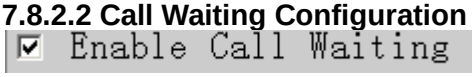


User can define only one prompt message (welcome message) that can be played when someone call the phone. The second defined voice will cover the first one.
Process: on phone operation



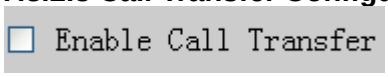
The unit is second. no answer call forward time setting.

6.7.8.2.2 Call Waiting Configuration



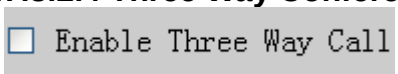
Configure enable/disable call waiting service；After it is enabled, user hold calls of the other party by <HOLD >button, by pressing <HOLD >button again, the call can go back to the previous call. If you want to use three way conference , this option must be enabled.

6.7.8.2.3 Call Transfer Configuration



It is for enabling or disabling phone <TRANSFER> button transferring function. If it is enabled, when user A are talking with user B , A press <TRANSFER> button on the phone then dial the third party number (C user) directly. the phone will transfer the calls to C. The result is C phone will ring (user B LCD display HOLD, A will hang up) . User C pick up phone then user B will talk with C .
If it is disabled, on phone operating transfer call will fail.

6.7.8.2.4 Three Way Conference Call



Configure enable/disable three way call；When user A are talking with user B as the call origination，user A click HOLD button to hold user B line and then dial the third party user C. User A click HOLD button again to recover the talk with user B. At this time user A press * key to make C into the three-way conference.

Operating process：HOLD button + third party number+ HOLD button+ *
Example:
A are talking with B .
A click HOLD button (holding B line) .then dial C number .
A will talk with C .
A click HOLD button again (holding C line), A dial *
A 、B、 C make the three party conference successfully now

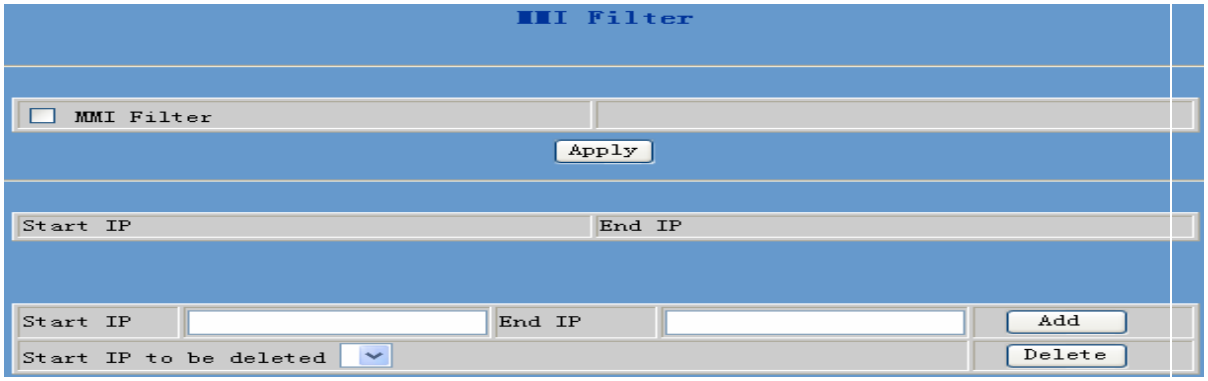
6.7.8.2.5 Black List

Incoming call in these phone numbers will be refused. It is for precluding incoming communication like Call ID. If user doesn't want to answer a certain phone number, please add this phone number to the list, and then this number will be unable to get through the phone.

6.7.8.2.6 Limit List

Outgoing calls with these phone numbers will be refused for example, if user don't want the phone to dial a certain number, please add the number to this table, and the user will be unable to get through this number.

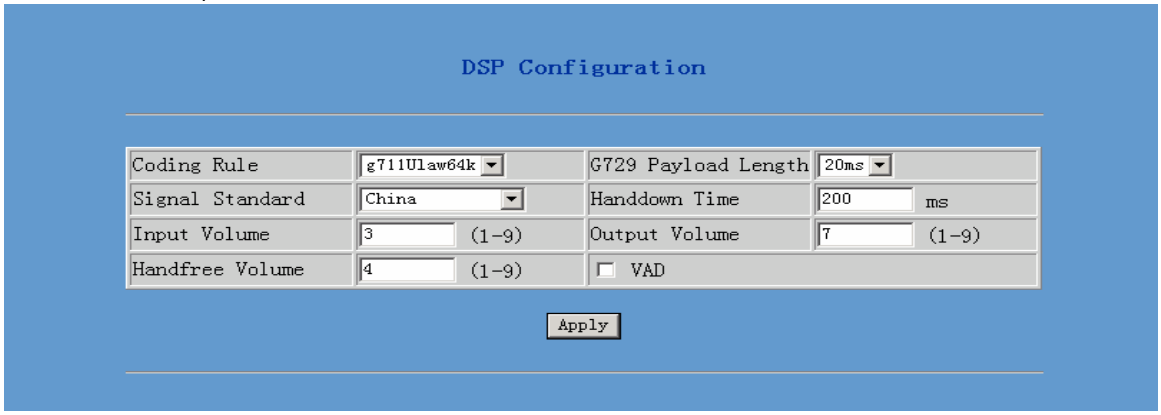
6.7.9 MMI Filter



MMI filter is used to make access limit toEP330.
When MMI filter is enable. Only IP address within the start IP and end IP can access EP330.

6.7.10 DSP Configuration

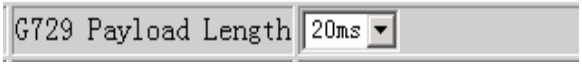
On this page, user can set speech coding，IO volume control, cue tone standard, caller ID standard and so on.



Configuration Explanation：

Configure Coding Rule**:** according to network bandwidth; support G.711a/u G.729 ,G7.23

Configure Signal Standard: according to country's phone voice;



Normally, G729 Payload Length doesn't need be changed into 10 ms;

Handset Out Volume.

Handset In Volume.

Configure Hand-free Volume

Configure hand-down time，that is, if the hooking time is shorter than this time, then the gateway will not consider the user has hand-down.
VAD: Enable/disable Voice Activity Detection

6.8 Dial Peer

Number IP Table Configuration

Function of number IP table is one way to implement the phone's calling online, and the calling of the phone will be more flexible by configuration the number IP table. For example, user know the other party's number and IP and want to make direct call to the party by point-to-point mode：the other party's number is 1234，make a configuration of 1234 directly ,then the phone will send the called number1234 to the corresponding IP address； Or set numbers with prefix matching pattern，for example, user want to make a call to a number in a certain region（010），user can configure the corresponding number IP as 010T— protocol— IP，after that, whenever user dial numbers with 010 prefix(such as 010－62201234),the call will be made by this rule. Bases on this configuration，we can also make the phone use different accounts and run speed calling without manual swap. When making deletion or modification, select the number first and click load, then click Modify and complete the operation.

Display of calling number IP image list

Dial-Peer

Number	Destination	Port	Alias	Suffix	Del length
157	192.168.0.157	5060	no alias	no suffix	0
187	192.168.0.187	5060	no alias	no suffix	0
9T	255.255.255.255	5060	del	no suffix	1
8T	0.0.0.0	5060	all:0755	no suffix	0
010T	0.0.0.0	5060	rep:8610	no suffix	3
6T	192.168.0.187	5060	no alias	12345	0
741	192.168.0.187	5060	no alias	999	0

Add

Click Add, the following figure will be shown at the lower part of the page.

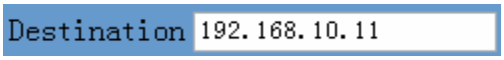
Phone Number
Destination (optional)
Port (optional)
Alias (optional)
Suffix (optional)
Delete Length (optional)

Phone Number 010T

It is to add outgoing call number, there are two kinds of outgoing call number setup： One is exactitude matching，after this configuration has been done, when the number is totally the same with the user's calling number, the phone will make the call with this number's IP address image or configuration; Another is prefix matching（ be equivalent to PSTN's district number prefix function），if the previous N bits of this number are the same with that of the user's calling number(the prefix number length)，then the phone will use this number's IP address image or configuration to make the call. When configuring the prefix matching, letter "T" should be added behind the prefix number to be distinguished from the exactitude matching.

Call Mode sip

Configure the calling mode：H323 and SIP.



Configure destination address，if it is point-to-point call，then input the opposite terminal's IP address, it can also be set as domain name and resolved the specific IP address by DNS server of the phone. If no configuration has been made, then the IP will be considered as 0.0.0.0. This is an optional configuration item.

Configure the other party's protocol signal port, this is optional configuration item：when nothing is input, then the default of h323 protocol is 1720，the default of sip protocol is 5060；lifeline required no configuration of this item, shown as 0.

Configure alias，this is optional configuration item：it is the number to be used when the other party's number has prefix；when no configuration has been made, shown as no alias.

Configure suffix，this is optional configuration item：it is the additive dial-out number behind the number; when no configuration has been made, shown as no suffix；

Example 1

	T mean any length digit number. Destination is 255.255.255.255 that mean calling out through SIP2 server. Destination is 0.0.0.0 that mean calling out through SIP1server

Example 2

Dial-Peer

Number	Destination	Port	Alias	Suffix	Del length
20T	0.0.0.0	5060	no alias	no suffix	0
200T	255.255.255.255	5060	no alias	no suffix	0

When user dial 200 , It will pass through SIP2
When user dial 2009 , It will pass through SIP2

When user dial 20096, It will pass through SIP2
When user dial 201, It will pass through SIP1
When user dial 20, It will pass through SIP1

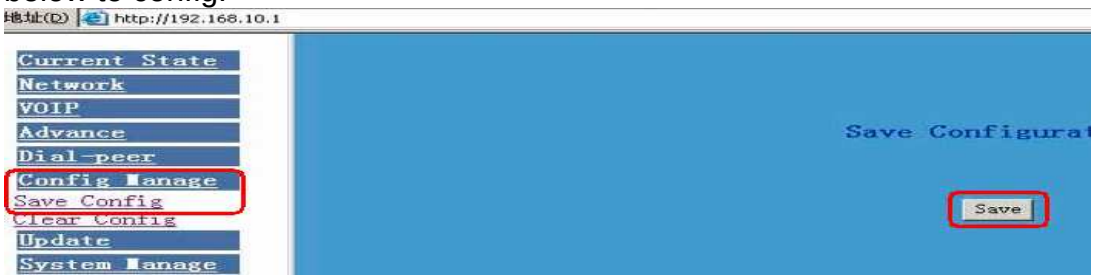
6.9 Config Manage (Save and Clear configuration)

Notice: clear config in admin mode, all settings restores to factory default; clear config in guest modem, all settings except sip, advance sip restore to factory default.

6.9.1 Save Config

Once change is made, Users should save the modified configuration to take effect, otherwise the IP Phone will go back to the last saved setting after phone reboot.

The interface of “Save Config” as below, please follow the four steps below to config.



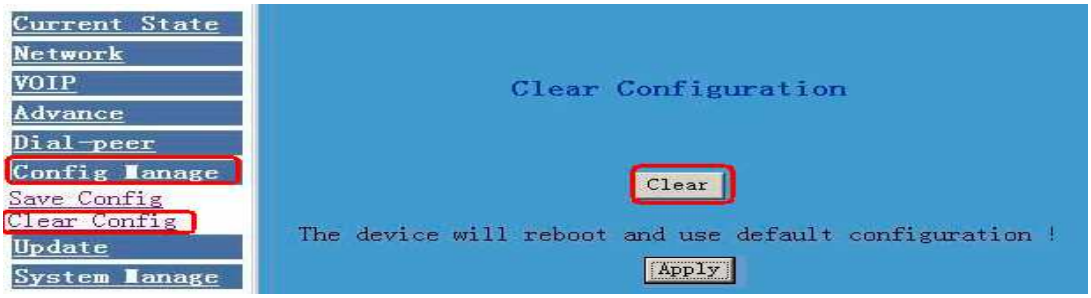
Enter “Config Manage” Menu →“Save Config” Submenu→ Click “Save” Button→ Return to “Current State” Web page

6.9.2 Clear Config

There are four method to clear config (set factory default), web 、telnet 、post mode、keypad. If the IP Phone doesn’t work properly after modifying config, users can clear all modified config on “Clear Config” web page. The phone will clear all modified config and restore the default factory configuration. (Default network type for WAN is DHCP mode; default LAN IP address is 192.168.10.1)

Process Please follow the below steps to clear config:

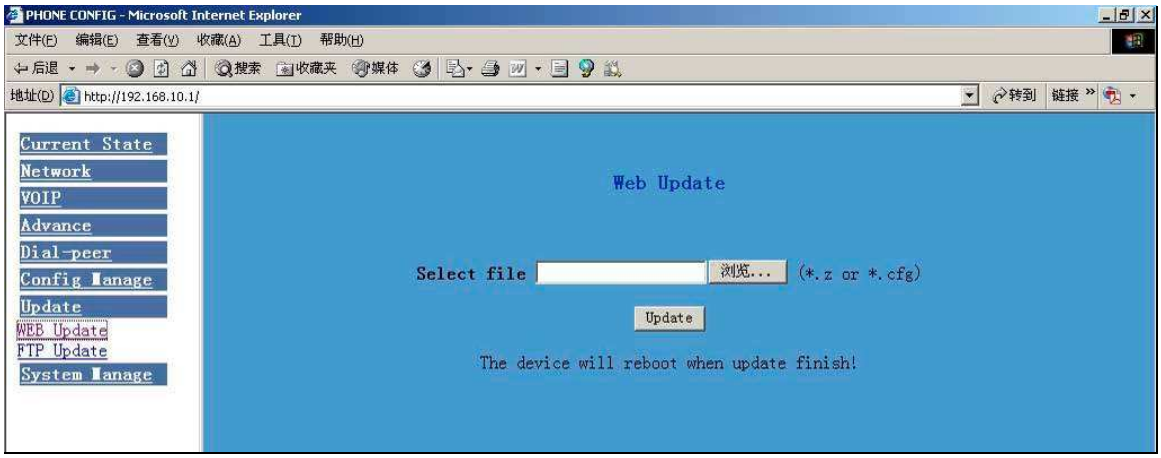
Enter “Config Manage” Menu →“Clear Config” →Click “Clear” Button →show “Submit Success” info on screen →Click “Return” button



6.10 Firmware Upgrade

6.10.1 Web Update

On this page, user can select the upgrade document (firmware or config file) from hard disk of the computer directly to run the system upgrade. After upgrade completed，reset the phone and it will be usable immediately. Firmware format is *.z as suffix



STEP:
Enter Update menu →WEB Update submenu→ click “browse” button→ download upgrade document from hard disk (firmware or config file provided by manufacturer) → click “Update” button →reboot IP phone to go into effect

Note:
Under system upgrade progress, IP Phone may not be restarted normally due to some system reason (e.g. electricity shut off), users can re-download under post mode.

6.10.2 FTP or TFTP Update

Users can download upgrade documents or lead in configuration files thru FTP or TFTP mode. Please make sure export and import rights are authorized by FTP or TFTP server before using FTP update way.

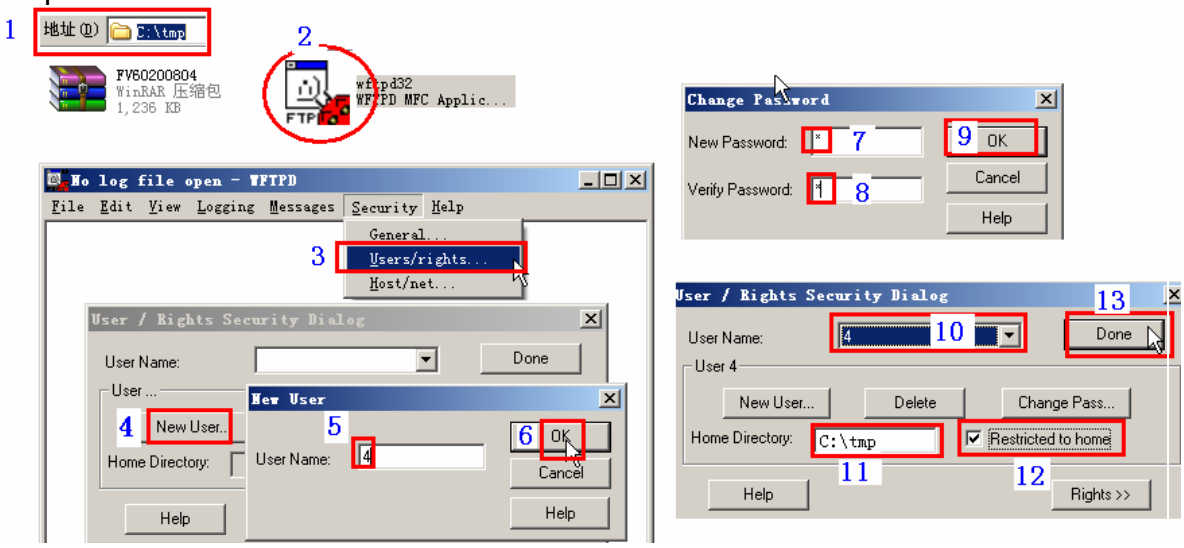
Definition of each parameter described as below

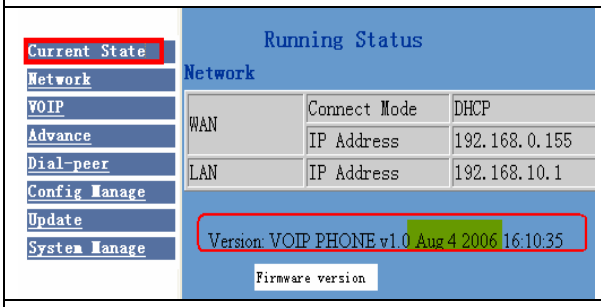
Server	**Set IP address for upload or download FTP/ TFTP server**
Username	Set username of the upload or download FTP server. If user select TFTP mode, no need to input username and password
Password	Set upload or download of FTP server password
File name	Set file name for system upgrade documents or system configuration files. system file take .Z as suffix，configuration files take .cfg as suffix；
Type	Config export/import/upgrade file type [three options]: “Application update” is system documents upgrade “Config file export” is export configuration files to server “Config file import” is import configuration files to gateway
Protocol	Set transport protocol type [two options]:FTP and TFTP

STEP:
Enter Update menu →FTP Update submenu→ Config FTP/TFTP server → Config username and password of FTP server (if select TFTP mode, please skip this step) →key in file name → choosing file type from the dropdown menu→ choosing protocol type

Example: (export config file)

1 FTP
<1> Copy Wftpd32 software and EP330 Firmware into a new Folder (example c:/tmp)
<2> Run wftd32.exe. Set a user name and password for EP330 ftp updating
The process is like the below picture showing from step 1 to step 13**.**

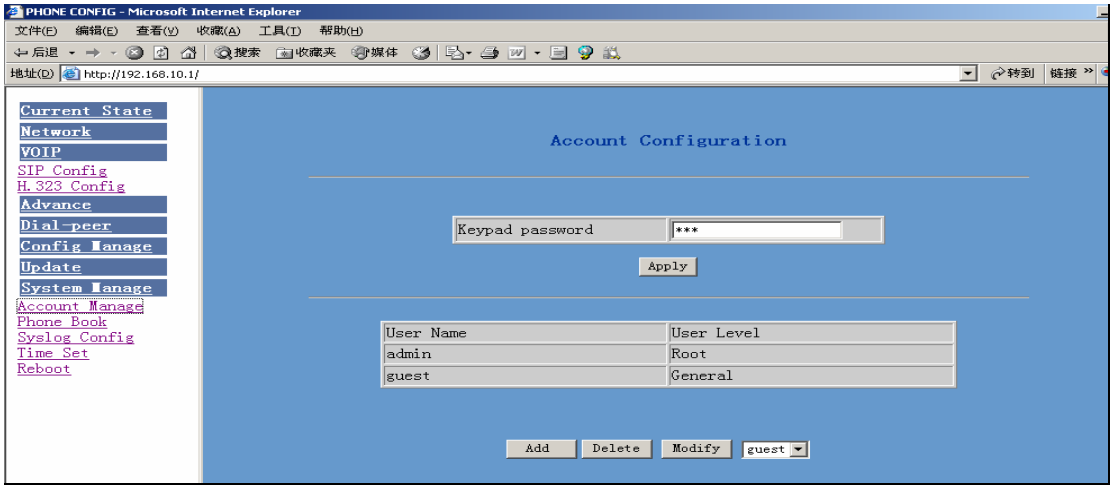


Update the firmware	Download config file to you pc.
	
After it update successfully. You will find the new version in Current State	After you click apply , you can find the file that it had download to your pc <c:\temp>

6.11 System Manage

6.11.1 Account Manage (maximum 5 accounts)

Users can edit users (add or delete) account and modify existing users' authority on this web page.



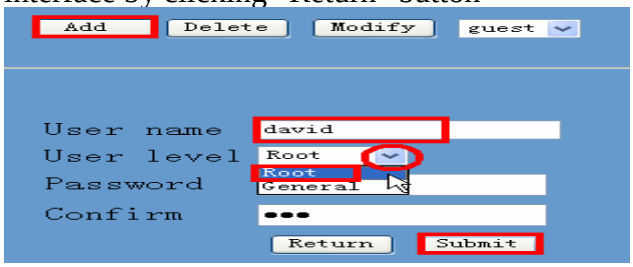
Definition of each parameter described as below

Keypad password	**Set keypad operation config password, default is 123,users can input new password then click "apply" button ,"submit success" info will show on screen, reset password successfully**
User Name	List existing phone user account name
User Level	Show existing user account level [two option]:Root and General: Root level users have the right to modify config; General level users have the right to read-only
Add	Add user account to IP phone
Delete	Delete increased user account
Modify	Modify increased user level and password

Operation Example

- Add one new account

Click "Add" button →input User name (No-Modify) →Choosing User level from dropdown menu →set new user password →confirm password →submit the new account info by clicking "submit" button →show "submit success" on screen →return to account configuration interface by clicking "Return" button

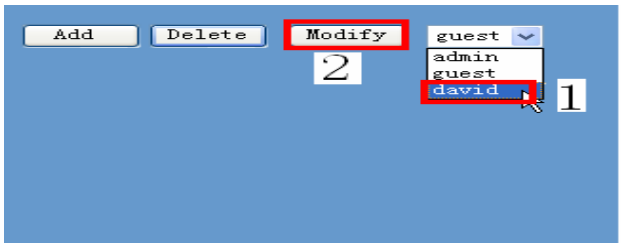


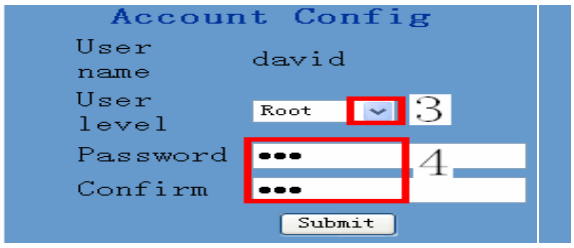
- Delete increased account

Choosing the account need to del. from dropdown menu→ Delete account by pressing "Delete button" →show "Submit Success" on screen

- Modify increased account (For Root-level user account only)

Choosing the modified account →enter below interface →modify user level or password →click “Submit” button to submit the modification





Owing to the phone's default account：accounts of the administrator level-admin account and the ordinary level—guest account are all weak account and weak password, the username and password will be easily to guess on public network, so the user had better modify the administrator and ordinary user.

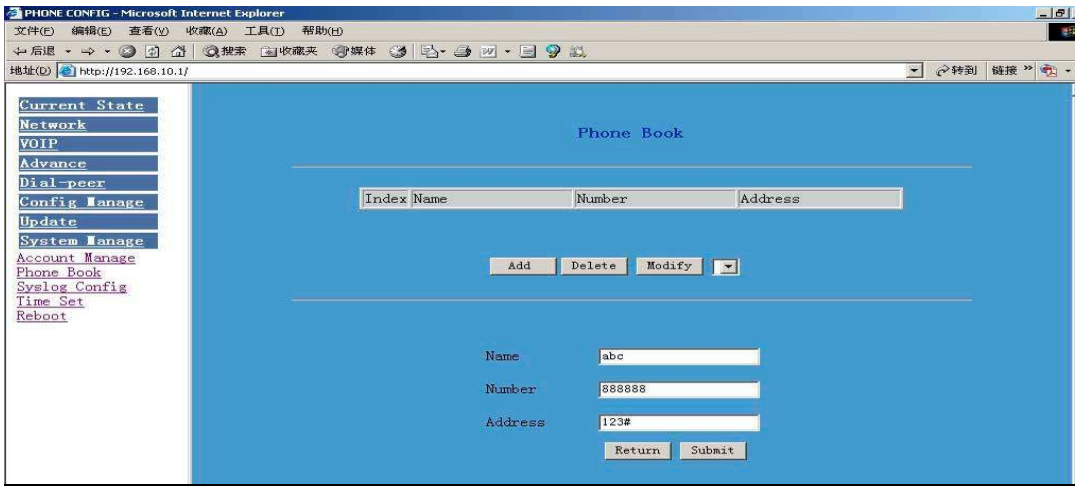
Enter with manager level when making modification，create a administrator account and a browse account (you'd better not set the name as admin, administrator, guest, etc.)，set password and then save configuration，entering with new manager account, delete default manager and browse account and save configuration，security will be enhanced!

6.11.2 Phone Book Configuration

On this page, user can save and configure telephone book.(maximum 100 record)

- Add phone book record

Click “Add” button →Input Name name, number and address→ click “Submit” button→ show “Submit Success” on screen



- **Delete Phone Book Record**

Choosing the record need to del from dropdown menu →Del account by pressing “Delete button” → →show “Submit Success” on screen

- **Modify Phone Book Record**

Choosing the record need to modify from dropdown menu→ pressing the “Modify” button→ key in the new phone number and Address → click “Submit” button → Return to “Phone Book” interface

Application: please refer to 4.2.1 chapter

6.11.3 Syslog configuration

Users can star or close syslog function and config syslog server IP address & port.

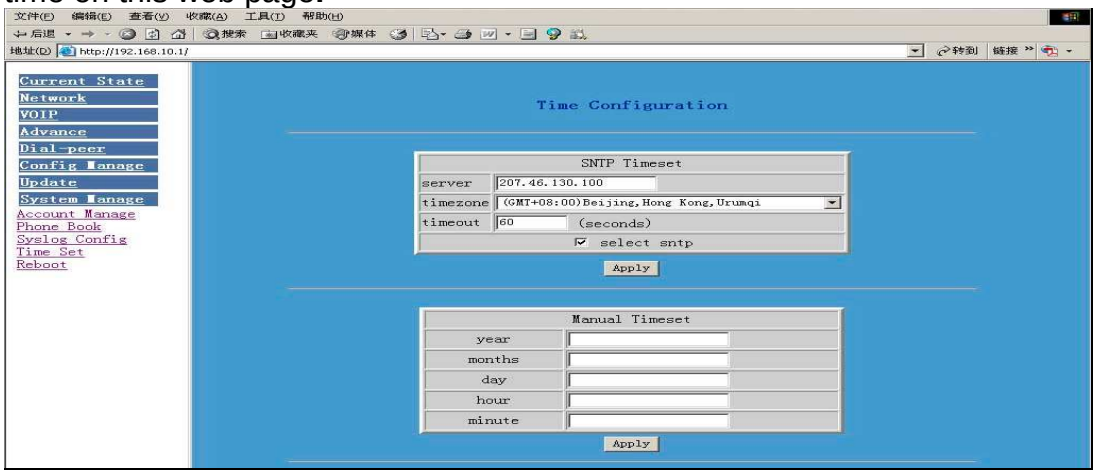
Syslog Configuration

Definition of each parameter described as below

Enable Syslog	**Config enable/disable syslog function, choose it and then click “Apply” button to go into effect**
Server IP	Config syslog server IP address
Server Port	Config syslog server port, click “ Apply” button after inputting server IP & server port to take effect

6.11.4 Time Set

Setting time zone and SNTP (Simple Network Time Protocol) server according to users location, users could manual adjust date and time on this web page**.**



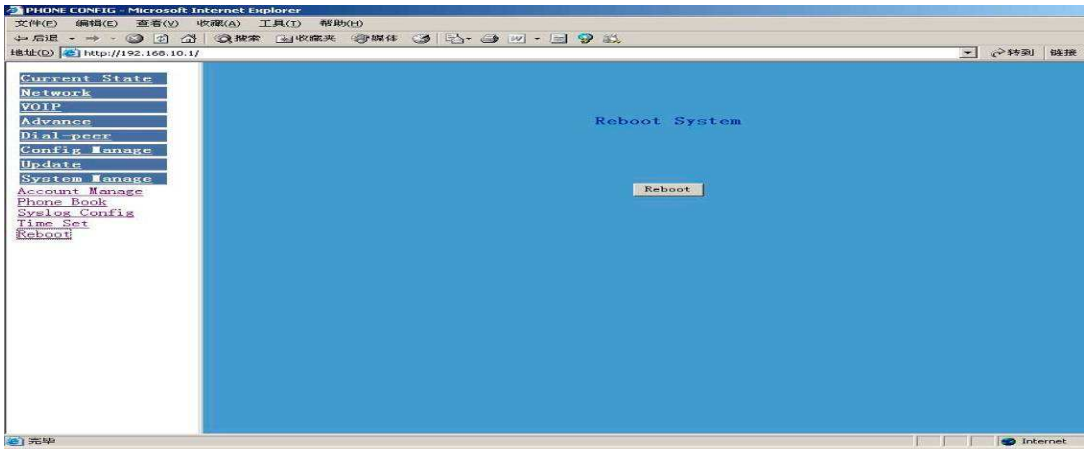
Definition of each parameter described as below

Server	**SNTP server IP address**
Time zone	Set time zone according to users location, Beijing time zone is GMT:+8:00
Timeout	use for socket calls which will block while doing the SNTP query, default value is 60 seconds

Manual Time set	Manual set date and time

6.11.5 System Reboot

Once any change of phone configuration is made, users need to reset IP phone to go into effect. Users should save the modified configuration before system reboot, otherwise the phone system configuration will go back to last saved setting. The system reboot interface as below



7 Default Factory Setting

- Gain IP address thru DHCP mode, WAN Port static IP is 192.168.1.179, LAN port IP is 192.168.10.1.Default is to start the DHCP service and NAT function.
- Default communication protocol is to use SIP, SIP port is 5060
- Default HTTP port is 80, Telnet port is 23
- Default number end is “#” button
- Default user account is admin and guest
- Default phone time is to use SNTP protocol to get GMT

8.0 Telnet configuration

8.1 Config Procedure

- Input command “cmd” on Run submenu under PC START menu, and then key in “telnet phone-IP-address enables users to config IP phone thru telnet.
- Input username and password, both default username and password of Administrator account are “admin”
- Config IP Phone through command lines

Note:

1. *We suggest users to config IP Phone thru web browser instead of keypad or telnet.*
2. *After any change of configuration, please remember to make "write" command to save changes and then input "reload" command to reboot IP phone to take effect.*

8.2 Telnet Basic Introduction

8.2.1 Basic Structure

User may use telnet command to access and manage gateway. EP330 adopts tree structure for telnet. Every node contains its sub-nodes or local command. User can type "help" or "?" whenever to see sub-nodes and all local command under current node. Besides local command, there are some global commands can be used in each node.

8.2.2 Basic Command

Logout: exit telnet mode.
Write: save current settings.
Type sub-nodes name in current node to switch to sub-node.
Type "!" or "exit" in current node to return to parent-node.
Type "help" or "?" can see all sub-nodes and all local command under current node, every help item has comments such as <command> or <node> to distinguish sub-nodes and local command. Type "help" or "?" in command can see all parameters using in this command.
When typing node name or command, user no need to key the full name, use TAB button will make it more efficient.
There are two types in command parameters: optional and required. "required" parameter use "-" as prefix and "optional" use "_" as prefix. User may type "-" or "_" then press TAB button for complementarily.

8.3 Global Command

Global command is available under all nodes, EP330 support following commands.

Command Name	Command function
chinese	Set the language of help prompt info to Chinese
clear	Clear screen
english	Set the language of help prompt info to English
exit	Go back to upper level of node
help	1.Display help prompt info 2.Display all subnode under current node and local command
history	Display the history info for inputting command
logout	Exit telnet config interface
ping	One test program

	using to check network or program availability
tree	Print out the tree structure of current node
who	Display current users login to PC
Write	Save configuration to flash
Reload	Reboot IP phone

Common Network command

Command Name
ping
tracert
show basic
show ip route
show ip arp
show ip netstat
telnet

	Set default
	Set all default

8.4 Net Configuration

8.4.1 LAN interface Settings

Path: <config-interface-fastethernet-lan>#

	Function
	[disable]enable bridge mode
	[disable]enable DHCP service
	[disable]enable NAT
	Show current DHCP rules
	Show LAN port IP address
	Show NAT info
	Change LAN port IP address

Example:

#config interfact fastethernet lan

<config-interface-fastethernet-lan>#ip –addr 192.168.1.10 –mask 255.255.255.0

8.4.2 WAN Interface Settings

path: <config-interface-fastethernet-wan>#

	Function
	[disable]enable dhcp client
	[disable]enable

	pppoe [disable]enable QOS
	Set default gateway IP
	Clear default gateway IP
	Set WAN port IP address
	Show WAN port settings

Example:

config interface fastethernet wan

<config-interface-fastethernet-wan>#ip –addr 202.112.241.100 –mask 255.255.255.0

You need to reconnect if the WAN port has been changed.

8.5 Net Service

path: <config-netservice>#

	Function
	Set DNS address
	Set alternate DNS address
	Set hostname
	Set http access port
	Show http access setting
	Set telnet access port
	Show telnet access port
	Set RTP initial port and quantity
	Add

	route rule
	Delete route rule
	Show route info Show netservi ce info

Example:
#config netservice
<config-netservice>#dns –ip 202.112.10.36 _domain voip.com
<config-netservice>#media-port –startport 10000 –number 200
<config-netservice>#route –gateway 202.112.10.1 –addr 202.112.210.1 –mask 255.255.255.0

8.6 Port Settings

path: <config-port>#

	Function set caller ID mode
	disable caller ID
	Disable call forward
	[disable]enable call transfer [disable]enable call waiting Set DTMF gain
	[disable]enable3-way conference Show port settings

8.7 SIP Settings

path: <config-sip>#

	Function [disable]enable registration [disable]enable auto detect

server	
Set sip domain	
Set DTMF mode	
Set auto detect interval time	
[disable]enable auto swap server	
Set local SIP signal port	
Set proxy server	
Set register server info	
Set alter proxy info	
Set alter server info	
Show current sip info	

Example:
#config sip server
<config-sip-server># server proxy ip 210.25.23.22 _port 5060 _user aaa _password 123456

8.8 User Management

path: <config-user>#

Function	
Change user right.	
Change user password	
Add new user	
Delete user	

	entry
	Show current sip info

Example:
#config user
<config-user>#entry –user abc –access 7
Example:<config-user>#access –user aaa –access 7

Note:
The command : –user xxx –access digit
Here if the digit is less 10 , then the user level is guest
If the digit is more that 10 ,then the user level is administrator

8.9 Debug (Level 0~7)

path: <debug>#

	Function
	show debug setting
	[disable]enable debug all modules
	[disable]enable debug app module
	[disable]enable debug cdr module
	[disable]enable debug sip module
	[disable]enable debug h323 module
	[disable]enable debug tel module
	[disable]enable debug dsp module

8.10 Show System Running Info.

path: <show>#

	Function
	show: accesslist (firewall) settings
	show network status
	show current call info

		show CODEC capability	
		show debug info	
		show LAN status and DHCP server info	
		show digital-map info	
		show LAN info	
		show WAN info	
		show arp table info	
		Show DNS gateway info	
		Show netstate info	
		Show route info	
		Show icmp packets Stat.	
		Show igmp packets Stat.	
		Show ip packets Stat	
		Show RTP packets Stat.	
		Show TCP packets Stat.	

	Show UDP packets Stat.	
	show gateway memory	
	show NAT informati on	
	show caller-ID info	
	show dsp info	
	show hotline info	
	show black list info	
	show outgoing limit info	
	show current phone number	
	show current port status	
	show PPPoE info	
	show QoS table info	
	show sip info	
	show UDP tunnel info	
	show running time	
	show gateway version	

8.11 Logout

Usage: #telnet –target -port

Login:xxx

Password:xxx
#logout

8.12 Tracert Trace Network Path Info.

usage: #tracert –host
Example: #tracert www.google.com

8.13 Update

usage:
update ftp –user xxx –password xxx –ip x.x.x.x –file xxx
update tftp –ip x.x.x.x –file xxx
Example:
update ftp –user abc –password 123 –ip 202.112.20.15 –file EP330.z

8.14 Upload Configure File

usage:
upload ftp –user xxx –password xxx –ip x.x.x.x –file xxx
upload tftp –ip x.x.x.x –file xxx

8.15 Download Configure to Flash

usage:
#download tftp –ip x.x.x.x –file xxx
#download ftp –user xxx –password xxx –ip x.x.x.x –file xxx
Example:
#download ftp –user abc –password 123 –ip 202.112.20.15 –file EP330.cfg

8.16 Password

usage:
#password
Enter new pass word: xxx
Confirm new password :xxx

8.17 Reload

usage: #reload
Reboot system

8.18 Network Diagnosis

There are some telnet commands for checking your network. Now Listing below for your information

Command	Function	Example
ping	Check if the destination is accessible	#ping www.google.com
tracert	Show network path info	#tracert www.google.com
show basic	Show network settings	#show basic
show ip route	Show route table	#show ip route
show ip arp	Show arp table	#show ip arp
show ip netstat	Netstat programme	#show ip netstat
telnet	Telnet to another device	#telnet 192.168.1.2

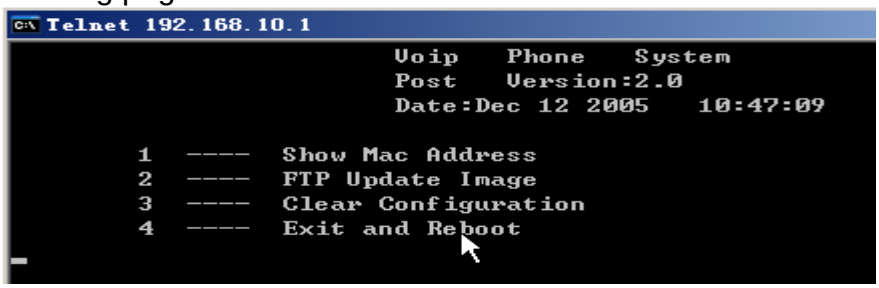
8.19 Restore to Factory Default

#setdefault (clear gateway settings expect network part)
#setdefault all (clear all settings.)

8.20 POST Mode(safe mode)

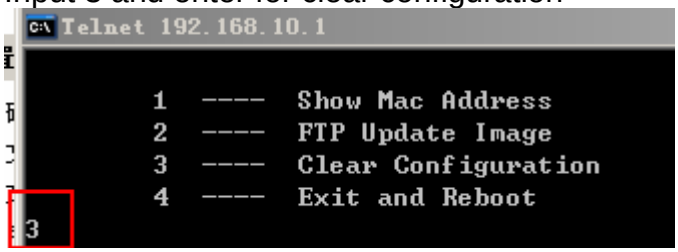
8.20.1 Access Post Mode Process

1 PC connect to EP330 LAN port
2 power off
3 press # and power on till the LCD display POST MODE
4 telnet 192.168.10.1
5 config page as below



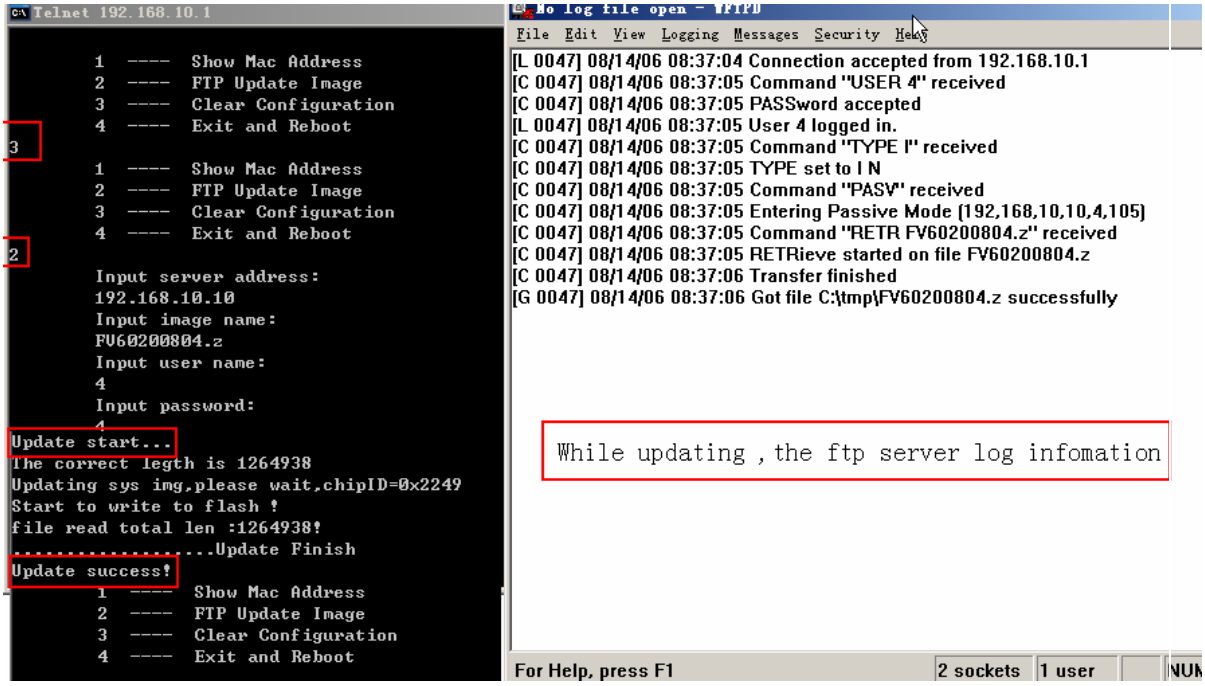
8.20.2 Post Mode Clear

Input 3 and enter for clear configuration



8.20.3 Post Mode FTP Update Firmware

Input 2 for update firmware


Telnet 192.168.10.1
1 ---- Show Mac Address
2 ---- FTP Update Image
3 ---- Clear Configuration
4 ---- Exit and Reboot
3
1 ---- Show Mac Address
2 ---- FTP Update Image
3 ---- Clear Configuration
4 ---- Exit and Reboot
2
Input server address:
192.168.10.10
Input image name:
FV60200804.z
Input user name:
4
Input password:
4
Update start...
The correct legth is 1264938
Updating sys img,please wait,chipID=0x2249
Start to write to flash !
file read total len :1264938!
.....Update Finish
Update success!
1 ---- Show Mac Address
2 ---- FTP Update Image
3 ---- Clear Configuration
4 ---- Exit and Reboot
No log file open - WFTPD
File Edit View Logging Messages Security Help
[L 0047] 08/14/06 08:37:04 Connection accepted from 192.168.10.1
[C 0047] 08/14/06 08:37:05 Command "USER 4" received
[C 0047] 08/14/06 08:37:05 PASSword accepted
[L 0047] 08/14/06 08:37:05 User 4 logged in.
[C 0047] 08/14/06 08:37:05 Command "TYPE I" received
[C 0047] 08/14/06 08:37:05 TYPE set to I N
[C 0047] 08/14/06 08:37:05 Command "PASV" received
[C 0047] 08/14/06 08:37:05 Entering Passive Mode (192,168,10,10,4,105)
[C 0047] 08/14/06 08:37:05 Command "RETR FV60200804.z" received
[C 0047] 08/14/06 08:37:05 RETRieve started on file FV60200804.z
[C 0047] 08/14/06 08:37:06 Transfer finished
[G 0047] 08/14/06 08:37:06 Got file C:\tmp\FV60200804.z successfully
While updating , the ftp server log infomation
For Help, press F1
2 sockets
1 user

EP330 provide safe mode. When there is booting problem because of setting problem or firmware problem. User can restore the factory setting or upgrade to a new firmware to solve this problem.